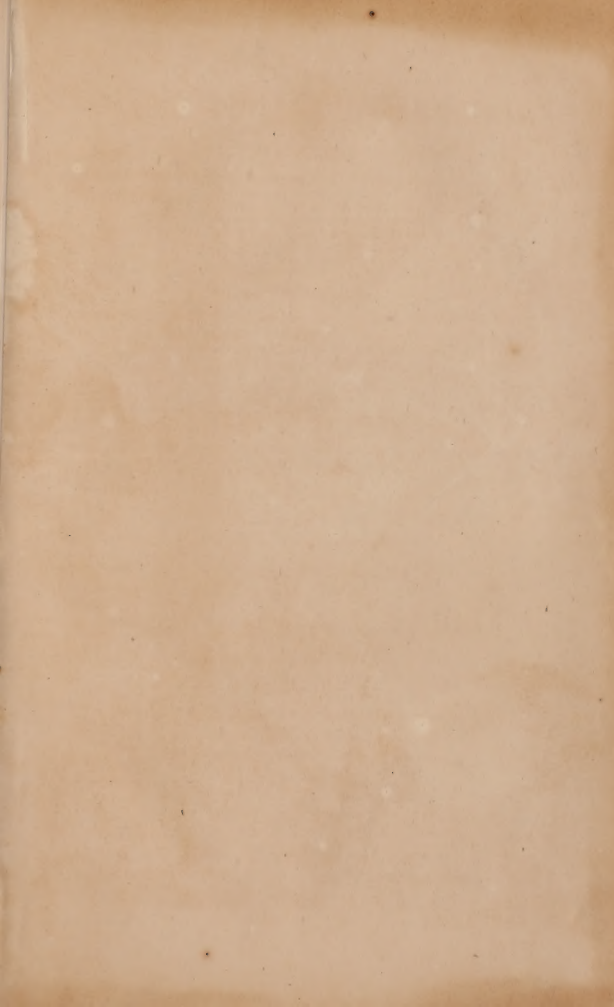
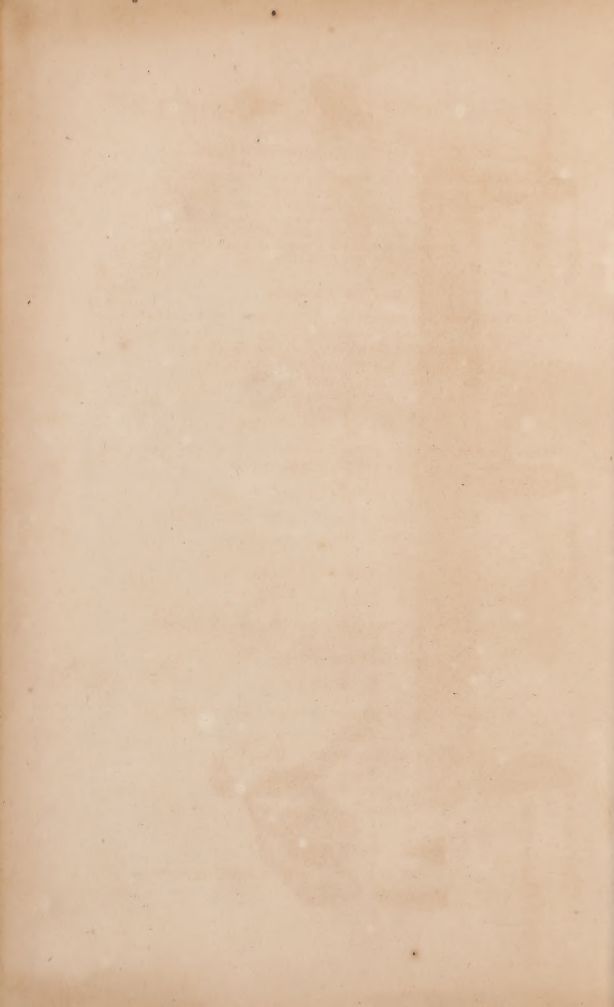
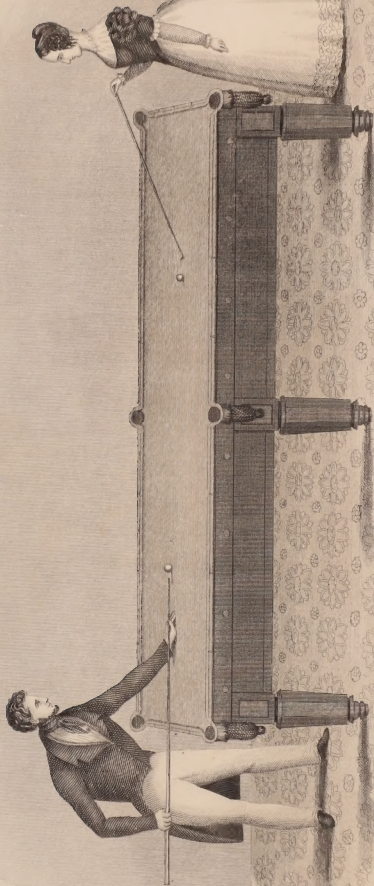


Ex Libris
JOHN AND MARTHA DANIELS

FIRST AMERICAN
PUBLICATION ON
BILLIARDS -
SCARCE
CRAVEN A103







L. B. Jones

BILLIARDS WITHOUT A MASTER;

Illustrated by Fifty Fine Copperplate Diagrams,

EACH PLATE CONTAINING FROM ONE TO TWENTY-FOUR SHOTS, MAKING A GRAND
TOTAL OF OVER ONE HUNDRED AND FIFTY SHOTS; FROM WHICH A
SUFFICIENT KNOWLEDGE CAN BE ACQUIRED TO ENABLE THE
PLAYER TO ACCOMPLISH ANY POSSIBLE STROKE ON THE
BILLIARD TABLE: ALL OF WHICH ARE FULLY EX-
PLAINED ON THE PAGE OPPOSITE THEIR
RESPECTIVE PLATES.

The Work contains, also,

A FULL AND COMPLETE SET OF RULES FOR THE GOVERNMENT OF THE GAME OF BIL-
LIARDS, AND THE VARIOUS GAMES OF POOL, &C., HINTS TO PLAYERS,
ADVICE TO AMATEURS, KEEPERS OF SALOONS, &C.; WITH A
VARIETY OF EXPLANATIONS, INTERESTING TO
ALL CONNECTED WITH BILLIARDS,
OR BILLIARD PLAYING,

BY MICHAEL PHELAN,

Now acknowledged, by all, to be one of the First Players in this country, and of long experience, both
as a Keeper of a Saloon, and a Practical Player.

TO WHICH IS PREFIXED,

A FINE STEEL PLATE FRONTISPIECE,

Showing a Billiard Table, and Players in Position.

ACCOMPANYING THE WORK, IS

A TREATISE

On the Origin, Rise, and Progress of the Game of Billiards.

COMPILED AND ARRANGED BY

D. D. WINANT,

Manufacturer and Dealer in everything appertaining to the Game of Billiards,

71 GOLD STREET,

BETWEEN BEEKMAN AND SPRUCE STREETS,

NEW YORK.

~~~~~

NEW YORK:

PUBLISHED BY D. D. WINANT, 71 GOLD STREET.

1850.

ENTERED, according to Act of Congress, in the year 1850, by  
D. D. WINANT,  
In the Clerk's Office of the District Court for the Southern District of New York.

L. DARBE & SON, PRINTERS, WILLIAMS-  
BURGH, L. I.

BILLIN & BROTHERS, STEREOTYPERS,  
10 NORTH WILLIAM STREET, N. Y.

## PUBLISHER'S PREFACE.

---

THE publisher of this Treatise cannot suppress his gratification in being enabled to submit to the amateurs of the "Noble Game of Billiards," this first American publication on the subject—a work, which he feels confident is unrivalled by any one hitherto published, in respect either to the simplicity and precision of its rules, or the number and variety of its illustrations.

Besides a frontispiece, showing the position of players, it contains fifty well executed plates, on most of which are engraved diagrams, or plans of different strokes or plays, accompanied by clear explanations, affording ample directions for the player, and comprising at the same time, all those improvements and practical novelties by which this elegant amusement has been so much advanced during the last twenty years.

This splendid work, in the production of which the publisher has spared neither time, labor, or expense, to render it in every respect worthy of the patronage with which he has long been honored as a manufacturer of Billiard Tables, includes, also, a full and clear description of almost all the various games played in the civilized world; the Laws and Rules by which they are regulated, and a variety of remarks of much value and importance to the student.

The publisher having had more than twenty years' experience as a manufacturer of Billiard Tables, and having revised the proof sheets of this work, whilst in course of publication, does not hesitate to recommend it as a requisite *addendum* to all Billiard Tables, and an invaluable book of reference to the novice, the amateur, or the aspiring player of the "Noble Game of Billiards."

D. D. WINANT.

NEW YORK, March 31st, 1850.

## PREFACE.

---

THE author of this work is far from flattering himself, that he presents to the public any considerable number of new principles in the science or art of playing Billiards; but from a number of years' experience, not only as proprietor of a saloon, but as a player of the game, he has been led to suppose, that some improvements might be made in the arrangement and simplification of the rules and examples of the science. How far he has succeeded, the public must judge.

Among the various games of modern times, no one has been so thoroughly adopted, and faithfully adhered to, both as a domestic and public amusement, as Billiards. It was, within a few years past, in our own country, confined almost exclusively to persons of wealth and elegant leisure, but has latterly become one of the most favorite amusements for all classes. To afford the means of acquiring this delightful game is the principal object of this publication, in which the utmost care has been taken to give such a description of the game, by means of printed instructions, as well as by diagrams and plates, that none need be ignorant of it. The young novice, with a little attention, may, by practice, become an elegant and accomplished player.

In conclusion, the author would commend this work to the lovers of Billiards, in the hope that it may contribute to their initiation and advancement in the science of that noble game, and that the information, which it contains, being the result of his own practical experience for a series of years, amongst the highest circle of amateurs, will not prove altogether unacceptable to those, who have passed their novitiate.

With these prefatory remarks, he dedicates the work to the discriminating and enlightened candor of the American public.

“THE AUTHOR.”

## BILLIARDS.

---

BILLIARDS is a game of French invention, the word itself being derived from the French word *Bile*, signifying a "Ball."

With regard to its first coming into notice, authorities differ. By some, it is supposed to have been first played by the Romans about the time of the Consul Lucullus; and by others to have been introduced by the Emperor Caligula—at all events, if known to the ancients, it was probably lost at the downfall of the Roman Empire, or else preserved by the monks of succeeding ages, and revived again at a late period.

Its first appearance in France was immediately after the first Crusade, when it was introduced by the Knights Templars. The members of that refined and intelligent Order most probably obtained their knowledge of the game at the Court of the Commeni, at Constantinople, the seat of the Roman Empire of the East.

With the downfall of that Order, caused by jealousy of their superior wealth, intelligence and refinement, the game fell into disuse, and though probably practised by a few, was not again revived till the reign of Louis XI. of France. That unwarlike, though able and politic prince, was passionately fond of the game, and it was soon adopted by the courtiers of that monarch, and practised by the ladies of his Court.

It became more widely known in the reign of Henry III., one of his successors, and was styled by that luxurious monarch, the "Noble Game of Billiards." The game was so fascinating that it spread in a very short time over Germany, Spain, Italy and England. It must have been widely known in the last named country, for

Shakspeare, in the play of Antony and Cleopatra—Act II.—Scene 5—makes Cleopatra exclaim, “Let us to Billiards.” We must from this, conclude that Billiards was in his time regarded as of ancient origin.

From England and France, it passed over to this country, and has at this present time become the favorite amusement of the American people.

Of all games now in vogue for the purpose of exercise and amusement, Billiards, both as a mental and physical exercise, stands preeminent, and is the most to be admired.

Many of the best and wisest men have selected it, as affording at once the most innocent, rational, and exhilarating relief from the severity and tedium of studies, which would otherwise exhaust the spirits, and impair the vital system.

In the game of *Bowling*, more physical force is required than in Billiards, but the infinite variety of the latter cannot be found, nor does it exist in the former.

In *Bowling*, there is a certain art or *knack* to be acquired in guiding and impelling the ball towards an object at a certain distance; but, in Billiards, who can tell what is the distance of the object to be played at, or what will be the position of the balls at the next stroke?

In *Bowling*, there is only a certain number of muscles brought into action, and the exercise is frequently of a violent kind. On the contrary, in Billiards, nearly all the muscles of the body are brought into gentle and active exercise.

*Chess* is allowed to be the most scientific game ever invented, but it is a solitary and selfish one. It is indeed a mathematical discipline, the encounter of two master spirits, but it calls for neither muscular energy or physical prowess—and the mere observer, unless a very skillful player, can take but little interest in a game often of a protracted and tedious duration. In Billiards, on the other hand, the spectator will soon become as much inter-

ested as the player, and, in fact, it may be considered as an intermediate game between Bowling and Chess, having some affinity with the muscular energy and activity of the one, and the mathematical calculation and foresight of the other—without partaking of the rude and boisterous earnestness of Bowling, or the enervating and exhausting tedium of Chess.

Billiards is an innocent, harmless, and gentlemanly amusement, and though sometimes desecrated to purposes of gambling, contrary to the true intent of the game—yet, as a general thing, playing for money is prohibited in the Billiard Rooms and Saloons of this country; in truth, it is a very unusual circumstance to hear, that money is wagered on Billiards at present.

Viewed in a pecuniary light, it is not an extravagant amusement, for, unless the players are much superior to the usual run of amateurs, the exercise and amusement will cost but a trivial sum per hour; in fact, many, who rate themselves, and are considered, pretty good players, cannot average two games per hour.

Billiards is suited to almost all classes. To the man of leisure, nothing is so well calculated to dissipate ennui, or impart cheerfulness and elasticity to the mind.

The man of business, the student, the professional man, the divine, and the statesman, will find it afford at once the most innocent, rational, and exhilarating relaxation from the pressure of business, the severity of studies, or the responsibility of duties, which would otherwise impair cheerfulness, and injure the vital system. Nor is the health of the invalid, which the exercise of Billiards is so well adapted to promote, to be slightly regarded. On an average, a player, while thus engaged, will walk between two and three miles an hour, to say nothing of the numerous muscles, which will in turn be called into action, but never be allowed to remain long on the stretch, since the attitude is constantly changing, and



each member is alternately put in motion. For this reason, many physicians regard Billiards, in point of salubrity, as preferable to every other species of in-door exercise; for while it affords healthful action, not partially, but generally, to the frame, it imparts to the mind a gentle exhilaration, which sustains, but does not exhaust the vital energy. To support these views, the testimony of some of the most eminent of the medical faculty might be produced.

To the man of science and the mathematician, Billiards form an inexhaustible subject for contemplation. The great variety of the curves and angles formed in this game is almost beyond conception, and may naturally assist the scientific man in the elucidation of his abstruse studies, and furnish him with some useful hints respecting the laws of motion, central gravity, etc.

To the physiognomist and the silent observer of human nature, there is no game that more thoroughly discloses the various dispositions of men than Billiards. The elated hope, the depressing fear, the sanguine exultation, the mortifying defeat—the philosophical resignation to fate, the indifference of success, and all the multiplied and manifold passions of the human mind, are variously depicted and easily discovered, by an attentive observer, on the countenance of the Billiard player. In fine, a Billiard Room is a school where the study of human nature can be pursued to advantage.

Having enumerated the various classes to which the game of Billiards is peculiarly applicable, the author would, with all deference, describe other classes, who should not play Billiards.

It may be safely laid down as a general rule, that those, who are addicted to the use of intoxicating drinks, or an inordinate passion for tobacco, cannot become good Billiard players. These indulgences only serve to impair the nervous system, and cloud the understanding, and as



so much depends on steadiness of hand and quickness of perception, all, who desire to become good players, should refrain entirely from such habits. There may be exceptions to such facts; but the novice and the amateur will find it safest to abstain from all habits tending to excite and derange the nervous system.

Another class, still, is the careless or indifferent players. This class is easily known, by frequently playing with a wrong ball, forgetting to chalk their cues, or a continued absent-mindedness, or by an indifference or inattention to the progress of the game, very annoying to the true Billiard player.

This class of persons will do well to quit playing altogether, for the author can assure them, and all others interested in the science, that no one can hope to attain success, or become a thorough and accomplished player, unless by an earnest desire to observe the rules of the game, united with a resolute and enthusiastic determination to acquire the scientific principles of the "Noble Game of Billiards." This is an immutable truth

Although Billiards is really and truly a scientific game, it is a disputed point among many good players, whether there is such a thing as chance known in it.

Billiards is so thoroughly based on purely scientific principles, that to some it appears reasonable enough to assert, that there can be no contingency attending it.

The mathematical calculations arising from like causes, and like effects, are so certain, that they can scarcely be gainsaid. For instance, if a ball in motion comes in contact with another at rest, the force imparted to the ball at rest, together with the resulting effect, can be calculated by the distance the balls roll.

It is a well known axiom, that a body in a state of rest will remain so, unless motive power or force is applied to it, and a body in motion will pursue a given course proportioned to the power applied, and checked only by its

own gravity, or by some obstacle. For these reasons, it has been confidently asserted, that the game of Billiards admits of no *chance*.

The advocates of chance, on the contrary, contend that the mechanical execution of the game does admit of contingency. They insist that the various positions the balls may assume are incalculable, and that, after the first stroke is played, it is next to impossible to foretell how, or where, the position of the balls may be, previous to the next stroke, until they have ceased rolling. If an automaton could be made to play Billiards, the game would be divested of all chance, and would then be reduced simply to a series of mathematical calculations, of the results of certain strokes or plays; but until such an automaton or machine can be produced, or until a player can be brought forward, who can foresee and foretell each succeeding stroke, and execute to a certainty any desired play, or be in fact a perfect master of the game, it must be conceded that there is a large share of chance in the game of Billiards.

In view of these conflicting opinions, it may be concluded, that *chance* is a component part of the game, as played at the present time. Time, progressive improvements, and new discoveries may remove contingencies, but divested of these, Billiards is robbed of one of its most attractive pleasures. It is the glorious uncertainty of success in any difficult undertaking, that urges man on to the goal, and adds energy to his exertions. This feature in the game, even to a skilful player, forms one of its chief attractions.

In view of these conflicting ideas, the author inclines to the opinion, that Billiards is composed of mixed features of science and chance, and that the grand secret for playing well, after acquiring facility of execution, consists in the management of the balls. Good players often succeed admirably, and make very long runs, by what

in Billiard parlance is called, *nursing the balls*. To attain this, an acute and mature judgment is requisite. Two players, of equal skill and facility of execution, may play together, and if one be superior to the other in point of judgment, he is sure to win, at least, three-fourths of the games played.

A few remarks, here, with regard to the deportment of Billiard players, may not be amiss.

As in the social intercourse of life, there are certain forms of etiquette and courtesy to be observed, so it is in Billiards, even if playing with an entire stranger; by observing how much he conforms to those little civilities and amenities, that render life pleasant, a pretty correct estimate of his character may be formed.

A well bred gentleman in playing with a stranger, will not, at the very commencement of the game, seize on a ball, and lead off, without first asking his opponent if he has a choice of balls, or if he will play on the lead, or lead off; as the game progresses, he will take care while his opponent is playing, to keep at least five feet from the table, not to pass before him, or between him and the table, or go behind him, while playing. Nor will he, while his opponent is playing, make any remarks, that may have a tendency to divert his attention from the desired object. He will not, even if positive, insist on claiming any count, that may be questioned, or where a doubt arises on the part of his opponent. Should a mistake or error occur in the game, and it be altogether detrimental to his own success, he will not, by word or deed, give his opponent reason to suppose that he is piqued or displeased, and should an unfavorable decision be given on the subject, or any thing of a disagreeable nature transpire during the game, he will not give vent to his spleen by passionate exclamations, or accuse his opponent of being the wilful author of his misfortune. In fine, his conduct will be that of a true gentleman, combining the "*suavi-*

*ter in modo* with the *fortiter in re*," partaking rather largely of the former.

It is amusing to observe the effect produced on some players by what is technically called a "scratch," or fortuitous stroke. Some will go on in the same manner, and take all they get as a matter of course—some will act as if they had become possessed of something to which they were not entitled—others, again, considering such plays to be part of the game, will give vent to their feelings of satisfaction in loud and gasconading exclamations, implying thereby their superior qualifications to play; and some again have been seen to throw themselves into all sorts of strange attitudes, flourishing their cues in such a manner, that the eyes or face of a spectator are in extreme peril, unless properly guarded; others have been heard to talk to and scold the balls, as if chattering and vituperation could, in one particle, alter the course of the balls, after play has been made. All such child's play should at once be discarded as unworthy of a Billiard player.

To the mere spectator, who does not understand the game, Billiards would seem to be an exercise utterly devoid of all amusement, and having no relation to skill. Not so, however, to the adept, who perfectly understands all the beauties of this noble game. He can discern at a glance the calibre and strength of another, merely by observing his attitude, or the manner of holding his cue while playing, besides affording him considerable amusement in observing the conduct and actions of good players while engaged at the game. On the contrary, all such antics, as those just described, are to him a source of unmitigated and unmingled disgust.

A great deal depends on the novice having a self-relying confidence in himself, and in his ability to acquire the game. The author has often heard many exclaim, "that they were disgusted with their style of

playing, as they had been practising and studying the game for so long a period of time, and they saw no improvement in their playing, and that they were about to give it up, as they despaired of ultimate success." All this is owing to their impatience, and their want of confidence.

Nothing can be accomplished, in which serious obstacles are not to be overcome, in order to obtain success.

One might as well expect to become a thorough accountant without a knowledge of arithmetic, or to complete a house by first putting on the roof, as expect to play Billiards, except by studying carefully the first principles of the science.

This brings us to the management of the game, with a few remarks on which, we shall close this treatise. The great mistake generally committed by beginners, after acquiring the rudiments of the game, is in playing for every easy and simple stroke or hazard, in order to count, regardless of the position the balls may assume after such play is accomplished. In the management and leaving the balls in a proper position for the next stroke, lies the *grand secret* and *strength* of the game. A novice might see the best Billiard player, who ever struck a ball, play a number of games, without ever suspecting him to be in anywise superior to the average of good players, if he judged of his calibre or capacity by the number of difficult strokes, which he should see executed by him during the game.

It is not alone the ability to execute difficult strokes, that constitutes the good player, but is owing to the united effect of "judgment, skill, and execution, combined."

For instance, the balls may be in such a position, that a hazard is the easiest and surest play to make; but by making that hazard, it is not in the power of the player to leave the balls in a favorable position for the next stroke; it would, therefore, be more judicious to attempt some

other stroke or play, though more difficult, provided there is a clearer prospect that a more favorable position or break of the balls will ensue. Another thing to be borne in mind by the pupil, is, that when he undertakes to learn the game of Billiards, he must not imagine, that he can acquire the art in a day, a month, or a year, unless he adopts the right course, and follows the correct principles of the game, and which he will find in this work, under the head of "Instructions in the Science and Mechanical Execution of Billiards." Having thoroughly studied the rules, and followed the instructions there laid down, he must not give way to despondency, if he does not immediately succeed, or improve as rapidly as he could wish, but remember, that it is like all other human attainments, to be only acquired by patience, practice, and perseverance.

A thorough knowledge of the game can only be acquired by continued practice, and a full understanding of its scientific theory—these, together with a steady hand and correct eye—capable of measuring distances at a glance, will enable the student to become a practised and finished player.

In issuing this work, the author does not promise or pretend to make good players of all, who may peruse it, but he intends it merely to assist the pupil in acquiring the game. He will, therefore, with the permission of the reader, who has attended him thus far, now introduce him to the "Instructions in the Theoretical Science and Mechanical Execution of Billiards!"

## INSTRUCTIONS

IN THE THEORETICAL SCIENCE AND MECHANICAL EXECUTION OF  
BILLIARDS.

---

THE student, who is at all conversant with mathematics, will readily understand the following principles:

1. Every body remains in a state of rest, or continues in uniform motion in a right line, unless that rest or motion be altered by a force applied to it.

2. The degree of motion is always proportionate to the amount of force applied.

3. Two bodies coming into contact will naturally form, in separating, an angle more or less inclining to a right-angle; and the dimensions of this angle always depend on the distance from its centre, at which the ball is struck, and the amount of force applied. (Refer to plate A, figure 2, balls A and B.—Impel ball A with Q. S.  $2\frac{1}{2}$ , and strike ball B  $\frac{1}{4}$  from the centre; the latter will pursue the course marked  $\frac{1}{4}$  ball, from the side of the circumference opposite to that struck; and ball A will fly off at an angle, whose acuteness will be proportionate to the force applied; for instance, if you strike the ball with Q. S.  $3\frac{1}{2}$ , the angle formed will incline much more to an obtuse angle than in the former case, where the strength was less. This rule will be fully elucidated in diagram, No. 37, figure 2.)

4. Reaction is always consequent upon action, and the mutual influence of two bodies of similar size and weight is always equal, and tends to opposite directions. Thus, whatever body attracts or repels another body is as much attracted or repelled by that body in its turn.

5. A spherical body, impelled over a plane, must eventually lose its motion, from the resistance offered to it by



the surface of the plane, and its own gravity, without regard to other resistance or influence.

The axis of a Billiard ball in motion depends altogether on the manner in which it is struck, and the quantity of strength or force applied to it; for instance, strike your ball exactly in the centre, with Q. S. 4, and it will glide along the bed of the table so rapidly, that it will scarcely revolve on its axis until the impetus is somewhat exhausted, and its velocity retarded; it will then naturally acquire a rotatory motion, and the axis will resume its natural position and become horizontal.

Strike your ball  $\frac{3}{8}$  R., Q. S.  $3\frac{1}{2}$ , and two motions will be communicated to it, viz: a progressive, and a twirling, or spinning motion; so long as the latter (the twirling motion,) prevails, the axis will be perpendicular, but will gradually change to the horizontal, according as the rapidity of the motion is decreased.

Strike your ball  $\frac{1}{4}$  A,  $\frac{1}{4}$  on either side, Q. S.  $3\frac{1}{2}$ , and there will be two distinct motions communicated—a progressive, and a rotatory motion; but in this case, the axis will be disposed diagonally, or midway between the perpendicular and horizontal, until the velocity is diminished.

Strike your ball  $\frac{3}{8}$  B, Q. S.  $3\frac{1}{2}$ , and two distinct motions will be communicated—a progressive and a revolving motion; in this case the axis will be horizontal.

The horizontal is the natural position of the axis when the ball is in motion, and any other is only acquired for a time. Whenever the ball, however, comes in contact with another ball, or with the cushion, the position of the axis is altered from the natural one, and it ceases to be horizontal.

Should a ball in motion come in contact with the cushion obliquely, there will be an immediate change in the position of the axis from the horizontal, and it will be inclined to the perpendicular. This change will be always proportioned to the violence of the concussion, and



will continue until the impetus is somewhat decreased, when it will resume its former and natural position.

A slight knowledge of the foregoing principles is very useful to the novice, who desires to acquire an insight into the theory of Billiards.

In the practical execution of Billiards, the pupil must learn—

1. How to make a bridge, or “rest,” with his left hand. Though apparently an easy thing at first sight, it is not altogether as simple as it seems, and it requires some practice to master it; nevertheless, it is very essential, and should be acquired first.

2. Where to grasp the cue, and how to handle it, and the attitudes, which must be assumed while playing. It is of the greatest importance, that the instructor should be perfect in this portion of the science, as it is next to an impossibility ever to become an adept, if you start on wrong principles.

3. The nature and position of the angles of the table.

4. How to strike a ball, and the effect of the point of the cue; how a Force, a Follow, and a Twist are produced; the nature and consequences of the rotatory, retrograde, and revolving motions, and the amount of strength requisite to execute any given stroke.

N. B.—The positions and attitudes of a player are, we repeat, of the greatest importance. He should acquire a perfect command over his actions, and never stand in a cramped or uneasy attitude, but give entire freedom to each and all of his muscles. Do not grasp your cue too tightly; and in making the stroke, do not play from the elbow, but use the whole arm freely from the shoulder downward. We do not pretend to suggest to the reader all the correct attitudes in the game—for naturally they are ever changing; but for the correct position in playing a ball from the given distance, he may refer to the frontispiece.

THE TABLE.—A Billiard Table is generally twelve feet long by six feet wide, as represented in the frontispiece; it is covered with fine green cloth, and surrounded with cushions to prevent the balls running off, and to cause them to rebound. There are six holes, or netted pockets, one at each side, and one in each corner, in order to receive the balls when driven into them. The table formerly had a pass, or iron arch affixed to it, through which the balls, at particular periods of the game, used to be played; but that method is now disused, and there is nothing placed on the table to obstruct its uniformly plane surface.

THE CUE.—The cues are made of well seasoned white ash, and vary in length from five feet to five feet five inches, and weigh from eight to twenty ounces; they are generally chosen according to length and weight, in accordance with the taste of the player.

The cue, although a more powerful instrument than the mace, is of comparatively recent origin.

About the close of the last century it was ascertained, that if the point of the cue were rounded off, more advantage would accrue by increasing its striking surface. The leathern point was introduced in the year 1807, since which period, the game may be said to have gradually become more perfect.

The author has been informed, by some elderly gentlemen and Billiard players of this city, that, about thirty years since, it was as unusual to see a cue played with as it is now to see a mace, and that in no Billiard Room could there be found more than one or two cues. One of the gentlemen alluded to above, and who is now in his sixty-fourth year, and from whom considerable information has been received about the game, as it was played from thirty to fifty years ago, states, that there was a French gentleman then in the city, who played with a cue exclusively. It was taken for granted,

that when there was more than one cue to be found in a Billiard Room, that the aforesaid gentleman played in that room.

**THE MACE**—Is composed of a fine stick, inserted in a boxwood head; there are three varieties—the Mace, the Half-mace, and the Long-mace. The mace should be about four feet in length; the half-mace one third longer; the long-mace double that of the mace. This instrument is only used in banking, and the author trusts the day is not far distant, when it will be discarded from the Billiard Room altogether.

**THE ARTIFICIAL BRIDGE**.—This is made of an ash stick, inserted in a cross head of cherry or mahogany, with three or more notches, on which to rest the cue. It is generally held in the left hand, and is only used to aid the player in reaching balls with the cue, when this cannot be accomplished by the “natural bridge.”

**THE BALLS**—Should be made of the best East India Ivory, close grained, well seasoned, and of as uniform size and weight as possible, for if not uniform in these respects, they will baffle the most skillful player. They vary in size from 2 inches to  $2\frac{1}{2}$  inches in diameter, and in weight, from  $4\frac{1}{2}$  ounces to  $7\frac{1}{2}$  ounces. Those of  $2\frac{1}{4}$  in diameter, and 6 ounces in weight, are most usually played.

**THE CHALK**—Should be entirely free from grit, dirt, and grease; for if impure, and retaining any of these substances, it renders the player liable to a miscue.

**THE COUNTERS**—Should be suspended  $4\frac{1}{2}$  feet above the bed of the table, and running lengthwise with it; though sometimes they are placed transversely; when so situated, they should run parallel with the string at the head of the table.

**THE ROOM**.—The dimensions of a room for one table should be 24 feet by 18 feet, the table being 12 feet by 6 feet, thus leaving a space of 6 feet at either end, and both

sides of it. For two tables, the space is 24 by 30; for three, 24 by 42, &c., in proportion to the number of tables. But the space of a Billiard Room can be greatly economised by having a double row of tables, whenever they can be so placed. The level of the seats should be two feet six inches from the floor, thus affording a proper height for the spectators to view the game. The light, if possible, should be thrown from above by well arranged sky-lights, so as to shine equally on all parts of the table, and thus prevent any shadow from a ball. The gas light should be three feet six inches from the bed of the table, and furnished with horizontal burners, as, by such an arrangement, no shadow is cast on the table. The floor should not be covered with any carpet, rug, or oilcloth whatever, as the walking of the players about the table is often impeded by such useless appendages. Care should be taken, however, to have the heads of the nails in the floor well driven down, as the balls in leaping from the table are liable to be damaged by coming in contact with them.

---

VOCABULARY OF TERMS AND PHRASES, GENERALLY USED IN THE  
GAME OF BILLIARDS.

*A Hazard*—Is causing a ball to go into a pocket, or, as it is generally called, "holding" a ball.

*Carom*—Is striking two or more balls with your own ball.

*Kiss*—When two balls come in contact more than once, or, when the balls, not played with, come in contact.

*Scratch*—When a stroke or count is effected by accident—success without design.

*Force*—Causing your own ball to recoil after striking another ball.

*Own Ball*—The ball with which you play.

*Object Ball*—The ball at which you play.

- Follow*—Causing your own ball to advance in its onward course, after striking another ball.
- Dead Full*—Denotes the contact or concussion of two balls in a straight line, without any divergence from the direct course. (Refer to plate A, balls A and B.)
- Cut, or Fine Ball*—Denotes that the object ball is hit fine, or barely touched by the circumference of your own.
- Miscue*—When the cue slips off the ball—a *faux pas*.
- Miss*—When the player's ball misses all the other balls.
- Bank*—Causing your ball to strike a cushion, before striking another ball.
- Doublet, or Cross*—Making a hazard by first making the ball to be holed rebound from the cushion.
- Jump*—Causing your ball to ricochet, or bound on the table.
- Jaw*—Where a ball strikes the jaw of a pocket.
- Hug*—Where a ball runs close to a cushion, and inclines towards it.
- Break*—Position of the balls after a stroke is played.
- Foul Shot or Stroke*—When the striker has violated any of the stipulated rules applicable to the game.
- Love Game*—Signifies, that one party makes game, before the other party effects a count.

INSTRUCTIONS TO PLAYERS AND MARKERS, IN RECKONING COUNTS  
IN THE AMERICAN, OR FOUR-BALL, GAME.

The principle of calculation is as follows, viz:

For each red ball holed, count *three*; for each white ball holed, count *two*; and a carom on the two red balls, count *three*, and caroms off a red on a white, or a white on a red, count *two*—thus:

If the striker hits a red and a white ball with his own ball, he counts two; this is called a carom.

- If he hits the two red balls with his own ball, he gains three points.
- If he hits the two red balls and his opponent's ball with his own ball, he gains five points, regardless of which ball he hits first or last.
- If he pockets his opponent's ball with his own ball, he gains two points.
- If he pockets a red ball with his own ball, he gains three points.
- If he pockets his opponent's ball, and caroms on a red ball, he gains four points.
- If he pockets a red ball, and caroms on his opponent's ball, he gains five points.
- If he pockets a red ball, and caroms on the other red ball, he gains six points.
- If he caroms on a red ball, and his opponent's ball, and pockets them both, he gains seven points.
- If he caroms on all the balls, and pockets his opponent's ball, he gains seven points.
- If he caroms on all the balls, and pockets one of the red balls, he gains eight points.
- If he caroms on all the balls, and pockets his opponent's and a red ball, he gains ten points.
- If he caroms on all the balls, and pockets both red balls, he gains eleven points.
- If he caroms on all the balls, and pockets them all, he gains thirteen points.

NOTE.—This last is the highest number that can be made by one stroke in this game.

## RULES FOR THE GAME OF BILLIARDS.

---

### AMERICAN, OR FOUR-BALL, GAME.

1. THE game commences by stringing for the lead, and the player, who, after striking his ball to the bottom cushion, brings it nearest to the cushion at the upper end of the table, wins the choice of lead and balls.

2. If, after the first player has strung for lead, his opponent should make his ball touch any other ball, or if he should pocket his own, he loses thereby his choice.

3. If the striker play with the wrong ball during the game, it is deemed a foul stroke, and consequently he cannot count; provided, the mistake be discovered before the second stroke is made. But, if more than one stroke be made with the wrong ball, without discovery, the player is entitled to all the points which he may have counted up to the time of discovery, and may continue his play.

4. If the balls of both the players should happen to be in hand at the same time, and he, whose play it is, should, through mistake, obtain his opponent's ball, and play with it under the impression that he was using his own, he is entitled to all the points he may make, and no penalty attaches to him for this mistake.

5. If a ball is discovered to have been changed during the game, and it cannot be ascertained by which player, the game must be played to the end, with the balls as they are.

6. If the striker is about to play with the wrong ball, no person in the room—not even the marker—has a right to disclose his error; and in a double match, his partner only is justified in doing so.

7. If the player, while in the act of striking his ball, touch it twice with his instrument, the stroke is considered foul.

8. In playing with the butt of the cue, the striker must withdraw it from his ball, before such ball comes in contact with the object ball.

9. The player has a right to use the bridge, or any other instrument pertaining to the game, at any stage of the play, unless it is otherwise stipulated in the commencement.

10. If the striker, by accident, should make his ball touch the other, while the balls are very near each other, it is considered a stroke, though not intended as such. But if a player, in the act of striking, is baffled or impeded by his opponent, or a spectator, he has a right to replace the balls, and re-commence the stroke; and any points made after the ball has been so replaced, are good, and must be counted.

11. If a person play at a ball while it or any other ball is rolling, the stroke is considered foul, and he is not entitled to any count he may have effected by such play.

12. If the striker, after having made a hazard or carom, interrupts the course of his or any other ball, the stroke is foul, and he cannot score the points he may have made.

13. After a red ball has been pocketed, or forced off the table, the striker is bound to see the ball placed on the proper spot again—provided, such spot be vacant before he strikes, for otherwise he can win no points while the ball is out of its place.

14. If the striker plays with the wrong ball, and at the same time makes a miss, or pockets it, he cannot score such count, but on the contrary, the same penalty attaches to him as if he had played with his own ball.

15. When a red ball cannot be placed on its proper



spot, it must remain off the table until that spot becomes vacant, and the balls cease rolling.

16. If the striker's ball, standing at the edge of a pocket, should fall into that pocket, before the striker has delivered his ball from the instrument, so as to leave him no chance for a stroke, the ball must be replaced in its original position, and the player is entitled to repeat his stroke.

17. If the object ball falls into a pocket, before the player's ball, after being delivered from the instrument, can reach it, the rule is the same as above; both balls must be replaced as nearly as possible in their original position, and the stroke repeated.

18. Should your own ball, when it is your play, be in contact with another ball, you cannot count, but it is imperative on you to make such play as will separate the balls; and in this case, you lose no point, unless you pocket your ball, or cause it to jump off the table, and you then lose as in ordinary cases.

19. Once the player has separated the balls to the extent of one inch, it is not imperative on him to separate them a second time, though it is quite possible that they may "roll" together, and come in contact after the stroke is made.

20. If, during the game, a ball should happen to jump off the bed of the table, and lodge on the cushion, it is to be considered off the table; and if a red ball, it must be placed on its appropriate spot; but if it should be the player's ball, he forfeits as many points as if he had pocketed it.

21. When the striker's ball is in hand, he can play from any point within the string, but it is imperative on him to play his ball *outside* the string, and he can gain no points, unless it is played out, or passes beyond the string.

22. If the striker's ball be in hand, and the other balls

within the string, and should he—either by accident or design—strike any of them, without first playing out of the string, it is optional with his opponent to let the balls remain as they are; to have them replaced in their original positions, or to compel the striker to play the stroke again.

23. If the striker's ball be in hand, and he play at the cushion within the string, for the purpose of striking any ball, he is not entitled to any count, which he may effect by such play, and the opponent has the same option as in rule 22.

24. If a ball springs off the table, and strikes one of the players or by-standers, and is thereby caused to fall back on the table, it is considered as much off the table as if it had fallen to the floor, and any count it may have effected cannot be scored by the player.

25. If the marker or any by-stander touch either of the balls—whether it is rolling or stationary—it must be placed as near as possible to the position it would apparently have occupied, if it had not been interfered with.

26. No person has a right to take up or remove a ball without the permission of his opponent.

27. No person has a right to disclose whether a stroke be fair or foul, until solicited; and in playing a double match, none but the opponents of the player have a right to inquire.

28. The striker can lose only two points by pocketing his own ball, or causing it to jump off the table—provided, his own come in contact with a white ball in such stroke, before it entered the pocket, regardless of the points he would have made, if he had completed his play.

NOTE.—This rule is observed more particularly in New York and its vicinity; but in many parts of the United States, the player forfeits the number of points made on such stroke previous to pocketing his own ball.

29. A carom on all the balls counts five, irrespective of the particular balls which are struck first or last.

30. The opponent always is bound to see if the striker plays fair, which, if he neglects to do, the striker wins all the points he may have made by that particular stroke, and the marker is obliged to score them.

31. Each party must take care of his own game, and his opponent has no right to answer any questions—such as, “Is the ball in, or out?”—“Do the balls touch?” and such like. These, and other similar circumstances, the player should discover himself.

32. No person has any right to disclose to the player, by hint or inuendo, the manner in which he should play his ball to the greatest advantage.

33. Neither after a stroke has been played, has any one a right to disclose or comment upon any error the player may have committed; as a stroke of the same kind may occur again in the same game.

34. The striker has a right to demand, that his opponent shall not stand facing him, or near him, so as to annoy or molest him in his stroke; and if his opponent persist in so doing, after being remonstrated with, the aggrieved party is justified in throwing up the game, and such game shall be considered drawn.

35. He who leaves the game before it is finished, and refuses to play it out, loses that game, although he may have made but one stroke; unless he does so for causes mentioned in rule 34.

36. The striker is not entitled to any point, unless one foot, at least, is on the floor while the strike is being made.

37. In playing a four-handed match, whenever the striker makes a hazard, he puts out his opponent—consequently, the opponent's partner takes his place.

38. In playing a four-handed match, if the striker pocket his own ball, or make two misses in succession, his hand is out, and his partner takes his place.

39. In a three-handed game, the players commence by stringing for the lead, and he, who brings his ball nearest to the upper cushion, wins the choice of lead and balls; and he, who brings his ball the next nearest to the cushion, is the player with him; the third player must wait until the first hazard is made, or two misses in succession.

40. In a three-handed game, he who makes sixty-six points first, is out; the other two players continue until the hundred is played out.

41. If the striker should cause his opponents to become sixty-six points, each, by a forfeiture, neither of the parties can claim game on the strength of this forfeiture, and can only win it by their next count.

42. The first person who makes sixty-six points ceases all play, and he, whose hand is out, plays on with that player's ball, as that ball is entitled to have its run out.

43. If the player should pocket his own ball, or make a miss, it counts for both his opponents.

44. If a player makes two misses in succession, or pockets his own ball, or causes it to jump off the table—his hand is out.

45. Should a dispute arise between the players, concerning the fairness of the stroke, the marker alone is authorised to decide the question; but if he be incompetent to make the required decision, he should inquire the particulars of the case from the disinterested company present, and, upon demanding silence, should go round the table to each person, separately, and ask, if he understands the game, and the nature of the dispute in question; and the majority of the disinterested company then present, and so interrogated, is to decide the dispute.

46. Should a decision be given contrary to the spirit and intent of these rules, the aggrieved party can notify his opponent of his intention to appeal from it; (this notification, however, must precede the next stroke, otherwise

the original decision holds good;) and if, at the conclusion of the game, the party against whom the decision was given, be the loser, and can prove it to have been wrong—he can claim a drawn game, and all stakes depending on such game must be drawn also.

47. Every person should be very attentive, and listen for the stroke before he enters the door of a Billiard Room.

48. The duties of a game-keeper are, to spot the balls when pocketed—to call each count distinctly, and loud enough for the players to hear him—to mark up the numbers made by each player immediately after he gets through his run, and before the next player can commence his stroke—and to see that all but the players stand away from the table, and give them room to pass freely round.

49. THE PHILOSOPHER'S STONE—"PAY AS YOU GO."

*[John Randolph, of Roanoke.]*

## DIFFERENT GAMES OF BILLIARDS.

---

THE four-ball game is now most generally recognised and played in this country—in fact, it is very unusual to see any other. But at times, foreign games are introduced, which it would be judicious for the student to understand and master. The unfrequency of those games, however, renders a long explanation unnecessary; and besides, the author has an objection to weary the patience of the reader, and swell his book to an unwieldy size, by elaborate dissertations on comparatively uninteresting subjects.

The regular English game, or Winning and Losing Game, (being that the most played of the foreign games,) the author will give in full the rules that govern in that game.

### THE WINNING AND LOSING GAME.

There are various numbers that constitute the game in England, but in this country, the numbers recognised in this game are sixty-three points up.

1. The game commences by stringing for the lead and choice of balls, as in the American game.

2. The red ball must be placed on the spot at the bottom of the table, made for that purpose, nine inches from the cushion, and replaced there when it is holed, or forced over the edge of the table, or when the balls are broken.

NOTE.—Breaking the balls is placing them as at the commencement of the game.

3. Whoever breaks the balls, leads off, unless when they are broken by mutual consent, in which case, the lead should be stipulated for, or strung for.

4. If a player make one stroke in a game, he must finish that game, otherwise he loses it.

5. If the striker make any points, he may continue his game until he ceases to make points.

6. If, when the cue is pointed, the ball should be moved without the striker's intending to strike, it must be replaced; and if not replaced before the stroke be played, the opponent may claim it as a foul stroke.

7. If a ball spring from the table, and strike one of the players, or a by-stander, so as to prevent its falling on the floor, it must be considered as off the table.

8. If a ball run so near the brink of a pocket, as to stand there, and afterwards fall in, it must be replaced, and played at, or with, as the case may be.

9. If, as it sometimes may happen, a ball be spinning on the brink of a pocket, and, although stationary for a time, afterwards fall in—in that case, the hazard is scored, if the motion be not gone out of the ball, at the time it falls into the pocket.

10. If the ball lodge on the top of a cushion, it is considered as off the table.

11. After the opponent's ball is off the table, and the two remaining balls are either upon the line, or within the stringing line, at the upper end of the table, where the white balls are originally placed in leading, it is called a baulk, and the striker, who is to play from the ring, must strike outside the baulk, so as to occasion his ball, in returning, to hit one of the balls in the baulk; if not, he loses one point.

12. A line-ball is when the centre of the ball is exactly on the line of the baulk—in which case it is to be considered in the baulk, and cannot be played at.

13. All misses to be given with the point of the cue, and the ball struck only once; if otherwise given, the opponent may claim it as a foul stroke, and enforce the penalty—make the striker play the stroke over again, or

have the ball replaced where it was struck from the second time.

14. A person cannot score, if he make a foul stroke.

NOTE 1.—It is called foul if a striker move a ball in the act of striking—or, if he play with the wrong ball—or, if he touch his own ball twice in playing—or, if he strike a ball whilst it is running—or, if he touch another ball—or, if his feet are off the floor when playing. The penalty in all these cases is breaking the balls, and losing the lead.

NOTE 2.—Enforcing the penalty for a foul stroke is entirely at the option of the adversary.

15. If the adversary do not choose to enforce the penalty for a foul stroke, the striker may play on, and score all the points that he made by the foul stroke, which the marker is bound to score.

16. If the striker hole the white ball, which is called a white running hazard—or if he hole his own ball from the white ball, which is called a white losing hazard, he gains two points; if he do both, he gains four points.

17. If the striker hole the red ball, he wins three; and if, by the same stroke, he hole his own from the red, he wins three more.

18. When the red ball is pocketed, or off the table, and the spot on which it should stand is occupied by the white ball, it must be placed in a corresponding situation, at the other end of the table; but if that should be occupied also by the other white ball, it must be placed in the centre of the table, immediately between the two middle pockets; and wherever it is placed, there it must remain, until it be played, or the game be over.

19. If the striker play at the white ball first, make a carom, and pocket his own ball, he gains four points—two for the carom, and two for the white losing hazard.

20. If the striker play at the white ball first, and pocket his own ball, and the red one, he gains five points.



21. If the striker play at the white ball first, make a carom, and pocket the red and the white balls, he gains seven points.

22. If the striker play at the white ball first, make a carom, and at the same time pocket his own and his opponent's ball, he wins six points—two for the carom, and two for each white hazard.

23. If the striker play at the white ball first, and pocket all the balls without making a carom, he gains seven points.

24. If the striker play at the white ball first, make a carom, and pocket all the balls, he gains nine points.

25. If the striker play at the red ball first, and pocket it and his own ball, he gains six points.

26. If the striker play at the red ball first, make a carom, and by the same stroke pocket his own ball, he gains five points—two for the carom, and three for the red losing hazard.

27. If the striker play at the red ball first, make a carom, and pocket the red and the white ball, he gains seven points.

28. If the striker play at the red ball first, make a carom, and at the same time pocket his own and the red ball, he wins eight points—two for the carom, three for the red losing hazard, and three for the red winning hazard.

29. If the striker play at the red ball first, and pocket his own, and the white ball without a carom, he gains five points.

30. If the striker play at the red ball first, and pocket all the balls, without a carom, he gains eight points.

31. If the striker, by striking the red ball first, make a carom, and by the same stroke, pocket his own and both the other balls, he gains ten points, being the greatest number that can be gained by one stroke.

32. If the striker, in taking aim, move his ball, so as

to strike the ball he is playing at, without intending to strike it, it is a stroke, and must pass as such, unless the opponent choose to let him play the stroke over again.

33. If the striker, in the act of striking, move his ball ever so little, it is a stroke.

34. If the striker miss the ball he intended to play at, he loses one point; and if, by the same stroke, his own ball runs into a pocket, he loses three points—that is to say, his opponent scores so many points. This is called a Coup.

35. If the striker force his own, or either of the other balls, over the table, after having made a carom or a hazard, he gains nothing by the stroke, and his adversary may play on without breaking the balls.

36. If the striker wilfully force his ball off the table, without striking another ball, he loses three points; but if the ball go over by accident, he loses one point only for the miss.

37. If the striker play with the wrong ball, and a carom or hazard be made thereby, the adversary may have the balls broken; but if nothing be made by the stroke, the opponent may take his choice of balls the next stroke, and with the ball he chooses, he must continue to play until the game is over.

NOTE.—The playing with the wrong ball must be discovered before the next stroke is played, otherwise no penalty attaches to it.

38. No person has a right to inform the opponent, that the striker has played, or is about to play, with the wrong ball.

39. No person, except the opponent, has a right to inform the striker, that he is playing the wrong ball.

40. If the opponent do not see the striker play with the wrong ball, or seeing it, does not choose to enforce the penalty, the marker is bound to score all the points that may have been made by the stroke.

41. If the striker's ball be in hand, and the red and the opponent's balls be within the baulk, the striker cannot play at them, except from a cushion out of the baulk.

42. If the striker's ball be in hand, and the other two balls within the baulk, and should he, either by accident or design, strike one of them, without first playing out of the baulk, the opponent has the option of letting the balls remain as they are, and scoring a miss—of having the ball so struck, replaced in its original position, and scoring a miss—of making the striker play the stroke over again—or, of making it a foul stroke, and breaking the balls.

43. If the striker's ball be in hand, he has no right to play at a cushion within the baulk, in order to strike a ball that is out of it.

44. If the striker's ball be in hand, and he, in playing from the baulk, should move his ball in the act of striking, it is a stroke, although the ball should not go out of the baulk; but the adversary may, if he choose, compel him to play the stroke over again.

45. If the striker's ball be near the ball he plays at, and he play the stroke, with the point of the cue, it is fair; but if he play it with the butt end, the marker must decide whether it be foul or fair.

NOTE.—The principle which ought to govern the decision of the marker in such a case, is this, namely, that the striker's butt must quit his ball before it comes in contact with the other ball.

46. If the striker's ball be on the brink of a pocket, and he, in the act of striking, miss it, and, in drawing back his cue, knock it into the pocket, he loses three points, it being a coup.

47. If the striker, in giving a miss from the baulk, should let his ball remain in the baulk, without its having gone out, the opponent may either let it remain so, or compel him to play the stroke over again.

48. If the striker, in giving miss, should make a foul

stroke, and his opponent claim it as such, and enforce the penalty, the miss is not scored.

49. No person is allowed to take up a ball without permission of the adversary.

50. If one of the players move a ball by accident, it must be replaced to the satisfaction of the adversary.

51. If, in the course of the game, a person take up a ball, supposing it to be in hand, the opponent may break the balls, or have them replaced to his own satisfaction.

52. If the marker, or a by-stander, touch either of the balls, whether it be running or not, it must be placed as near as possible to the place it did, or would, apparently, have occupied.

53. If, after the striker has made a carom or a hazard, he take up the ball, thinking the game is over, the opponent has the option of breaking the balls, or having them replaced.

54. If, after the striker has made a miss, or a coup, he take up a ball, supposing the game to be over, he loses the game.

55. If, after the striker has made a miss, or a coup, the adversary, thinking the game is over, take up a ball, the last striker may have the balls replaced as they were, or break the balls.

56. If, after the striker has made a carom, or hazard, the opponent, thinking the game is over, when it is not, take up a ball, whether running or not, he loses the game.

57. If, after striking, the striker should obstruct or accelerate the running of the balls in any way, it is at the opponent's option to make it a foul stroke and break the balls, or have them replaced.

58. If, after the striker has played, the adversary should obstruct or accelerate the running of the balls in any way, the striker may claim the right of breaking the balls, or having them placed to his own satisfaction.

59. No person has a right to offer advice to the players,

during the progress of the game. But, 1st—If a person be appealed to by one of the players, or by the marker, he has then a right to give an opinion, whether he be interested in the game or not; and, 2d—If a spectator see the game marked wrong, he has a right to mention it, provided, he does it in time for it to be rectified, but not afterwards.

60. No person is allowed to walk about the Billiard Room during the game, make a noise, or otherwise annoy the players.

61. When silence is demanded in the room, it is expected that all persons will comply therewith.

62. It is expected that all persons in the room, whether they are playing or not, will conform to the foregoing rules, in so far as they relate to them respectively.

---

### THE RUSSIAN GAME.

FIVE balls are used in this game, viz: two white balls, one red, one blue, and one yellow.

The red ball is placed on the deep red spot, the blue on the light red spot, the yellow in the centre of the table, on a direct line half-way between the red and blue balls.

There are several ways of playing this game—as pocketing the balls in their respective pockets, and the caroms counting two, three and four, &c., according to the ball from which it is made. The following is the usual way of playing it in this country. It is played one hundred points up, the same as the American game, although in Russia and Germany the game is played only forty points up:

The red ball may be pocketed in any pocket, and scores three. The blue ball may be pocketed in any pocket, and scores four. The opponent's ball may be pock-

eted in any pocket, and scores two. The yellow, or Caroline ball, as it is termed, must be pocketed in the side pockets only, in order to score six, but holing it in any corner pocket causes a forfeit of six.

A carom on the white and red, scores two; a carom on the red and blue, scores three; a carom on or off a yellow or Caroline ball on the red or blue, scores four; a carom on or off the white ball and Caroline, scores three.

The striker, when leading off, or when in hand, may play from any point within the string.

If the striker pocket his own ball, he loses according to the ball he strikes, viz: four for the blue, six for the yellow, two for the white, three for the red.

The striker, by pocketing his own ball, loses all the points he may have made by that stroke, previous to going in the pocket.

It will thus be perceived, that it would be possible for him to lose twenty-one points by one stroke; that is, if he played at the yellow ball, and caromed on and pocketed all the balls.

If the player, in giving his lead, touch any of the three balls, he loses one point—if two, two points—if three, three points; and if the striker's ball occupy the place of any of the three balls, he must take it up, and lead over again.

If the striker force his own ball off the table, he forfeits the same as in holing his own ball.

If the striker holes a ball played at, he is entitled to play on any ball on the table.

After a carom has been made, *without* a hazard being effected, the striker must play on the Caroline ball. The player cannot continue his stroke after a second carom has been made, unless a hazard has been effected.

The game must be ended by a hazard being made.

## THE SPANISH GAME.

THIS game is played with three balls, and five wooden pins, which are set up in the centre of the table, between the two side pockets, about two inches and a quarter apart, forming a diamond shape.

The game is thirty-one up, and is scored by hazards and caroms, and by knocking down the pins.

If the player, after striking a ball, should knock down a pin, he gains two points, and so on, scoring two points for every pin he knocks down. If he knock down the middle pin alone, he gains five points; should he knock them all down at one stroke, he wins the game.

If the striker pocket the red ball, he gains three points, and two for each pin he may have knocked down at the same stroke.

If the striker pocket a white ball, he gains two points, and two for each pin he may have knocked down.

If the striker knocks down the pins with his own ball, before striking another ball, he loses two for each pin he knocks down.

If the striker pocket his own ball from another ball, he loses all the points he would otherwise have made by the stroke; for instance—if he play at the red ball, pocket it, and make a carom, and at the same time knock down two pins, he loses twelve points, viz: three for the red, two for the carom, two for each pin, and three for his own ball going in from the red.

If the striker cause his own ball to fly off the table, he loses three points, and if, after making a carom, or hazard, he loses as many points as he would otherwise have gained.

All the rules, *concerning strokes, &c.*, at the game of Billiards, may be observed at this game, in addition to the above.

## POOL.

A NUMBER of small balls, each numbered from one upwards, according to the number of players, are placed in a pocket, and drawn from thence by the marker, and distributed to the players. No. 1 leads the red ball—No. 2 plays at No. 1—No. 3 at No. 2,—the striker always to play with the ball last played at, except when a hazard is made; then the next player leads with the red ball, and he, whose turn is next in order, plays from the string.

1. In Pool, the red ball must first be played, and in leading it, rule 2 must be strictly enjoined, with this exception—if the first lead is not liked by the player, he may always have the privilege of spotting his ball.

2. If the leader follows his ball with either mace or cue, beyond the middle pocket, it is no lead; and if his adversary, or the person next to play, chooses, he may make him lead again, or cause the ball to be placed upon the pool spot, at his option.

3. If a player, in the act of striking, is baffled or impeded in his stroke by his opponent or a spectator, he has a right to re-commence his stroke.

4. If the striker, while in the act of playing, should accidentally touch or move his own ball, without intending at the time to make a stroke, he loses no point; but the opponent may put the ball back in the place where it stood; and if he hole the ball, after it has been replaced, it is good, and the ball so holed shall be marked.

5. Whoever stops or touches a ball when running, either with the instrument, with which he plays, or otherwise, it is deemed a foul shot, and the person so touching the balls, before they have done running, loses a mark. This rule must always be enforced.

6. If a ball is made to go extremely near the brink of a pocket, and, after sensibly standing still for a longer or shorter time, should fall into it, the striker wins nothing,



and the ball must be put on the same brink where it stood, before the adversary makes his next stroke; and if it should fall into the pocket at the instant the striker hath played upon his ball, so as to prevent the success of his stroke, the balls must be replaced in the same position, or as near as possible, and the striker must play again.

7. If any person calls upon another to play out of his turn, the person so calling shall take the mark, and not he who played, and the next in turn must lead.

8. If any person plays out of his turn, unless called upon, he must be marked, unless he holes the ball played at, in which case the ball so holed shall be marked, and the next in turn to the person, who ought to have played, must lead.

9. Any person, whose ball is alive, may take a hazard, and if he misses holing the ball, he must be marked.

10. The person, whose turn it is to play, has the first right to take a hazard, and he must be marked if he does not hole the ball—provided, any person in the pool previously offers to take such hazard.

11. There can be but one privilege, and that must be taken by the first person killed, unless by consent of all the players, that it may remain open; and the person first killed must decide at once whether he will take it, and play in turn

12. No person can take a ball, if in the room when the balls are drawn, and he neglects to do so in turn, unless said person obtains the consent of all, who are playing; and no person in any case can take a ball after the privilege is gone.

13. No person in the pool can have an interest in any other ball than the one which number he draws; nor can that person buy any other ball, or own an interest in any other, so long as his original ball is alive; but when his original number is dead, he may buy that of any other, who may choose to sell, but cannot permit any other per-

son to play it, who may have an interest with him, but he must play it out, unless he sells his whole interest—in which case the person buying, if originally in the pool, shall finish playing out the number. No person, not originally in the pool, can buy in.

14. If a person sells his ball upon the lead, the purchaser must abide by the lead, or may spot the same, as he pleases.

15. If a person makes a lead, he cannot change the same, even if the person next to play sells his ball to a third person after the lead has been made, but he may have the liberty of spotting it.

16. No person can strike twice in succession; and if two are left in the pool, and A strike at the ball and hole himself, B must lead; but should A hole B's ball, then A must lead.

17. When there are but two left in the pool, and one of them wishes to divide or sell, the adversary shall always have the privilege of buying, and if he refuses to give as much as another offers, then his adversary has full right to sell to any one, who has been in the pool.

18. If a person, playing upon the lead, places his ball out of the string, and is challenged by the previous player, while in the act of striking, the balls must be placed as before, and the stroke made over.

---

### PIN POOL,

AS PLAYED IN NEW YORK.

THIS game is played by two or more persons in the following manner: There are five small wooden pins set up in the centre of the table, diamond-like, as in the Spanish Pin Game—the one at the apex next the head of the table is No. 1—the one to the right is No. 2—the one to the left is No. 3, and the one next the foot of the table is

No. 4, and the one in the centre is No. 5—and they are placed about two and a half inches apart from one another.

The usual way of designating them is, by marking the numbers on the cloth next to the spots, which each pin occupies, and the rotation of the players is determined by the small numbered balls, as in Two-ball Pool.

After this is determined, each player has another small ball, with a number on it, dealt to him by the game-keeper, and this is termed his private ball.

The red ball is then placed on its appropriate spot, about five inches from the lower cushion, midway between the two corner pockets, and he, who has ball No. 1, plays from the string; No. 2 then plays from the string with the other white ball; No. 3 succeeds No. 2, and can play with, or at, any ball on the table.

There are only three balls used in this game—one red, and two white balls. The object of the players is to knock down as many pins as will count thirty-one, by adding the pins so knocked down, and the number on the private ball, together, and he, who first makes thirty-one wins the pool.

For example: If the number on the private ball be ten, it will then be necessary for the player to make the number count twenty-one, by the pins.

In Philadelphia, and many other parts of the United States, four balls are used, and the game varies in many other respects from the New York game.

The number on the private ball is kept secret from the other players, although a skillful player may form a pretty correct idea of the number of the player's private ball, by the strokes and angles played by the striker.

#### RULES FOR PIN POOL.

1. He, who draws No. 1, must play with one of the white balls at the red ball, or place it on the spot used as

the deep red spot in the game of Billiards. He, who draws No. 2, must then play with the other white ball, or, if he so choose, can place it on the spot used as the light red spot.

2. No. 1 and No. 2 have the privilege of playing from any part of the string; No. 2 can play on any ball outside the string; and should all the balls happen to be within the string, he may have the red ball placed on its appropriate spot for the purpose of playing on it.

3. The player must first strike a ball with his own ball, before he knocks down the pins, or otherwise it is no count.

4. If a player should first touch a pin with his own ball, and then strike another ball, and that, or his own ball, should get pins thereby, he is not entitled to count.

5. After the second stroke is made in the game, the striker has a right to play with or at any ball on the table.

6. Missing or pocketing one's own ball, or another, or jumping one's own, or another ball, off the table, goes for nought—knocking the pins down alone counts.

7. Should a ball be holed, or off the table, it must be placed on the spot used for spotting the red ball at the first stroke, and if that spot be occupied, it is then placed on the deep red spot; and if that also be occupied, it is then to be placed on the light red spot. If the player should make a miss, his ball is to be spotted in the same manner.

8. If the striker should knock down the four outside pins, and leave the centre one (No. 5,) standing, he wins the pool.

9. Sufficient time must be allowed, after the stroke is made, to give the player an opportunity of adding his game up, and to proclaim pool, if he makes it, before the next play, and if he neglects to claim it before such play, he must wait until his own turn to play comes again. And if another makes pool in the mean time, that other is entitled to it, and not he, who first made it.

10. Should a ball rest so as to occupy any of the spots intended for the pins, such pins are to remain off the table, until those spots so occupied become vacant.

11. Should a ball roll against a pin, and cause it to lean over, or knock it off the spot, without such pin falling, the striker cannot claim such pins, as nothing counts but knocking the pins down. But when the pins are knocked two inches from the spots, they are considered down, whether they be up or down.

12. Should a player play out of his turn, he cannot avail himself of any count he may have made by such stroke, and if he gets pins enough to burst him, it is his own loss—provided, he was not called on to play; in such case, he cannot suffer by it, and any count effected by such stroke goes for nought. He, whose turn it was to play, when the other was called, or played out of his turn, plays next in order.

13. If the striker knock down more pins than would, by adding such pins to the number on his private ball, count more than thirty-one, he is *burst i. e. dead*; and if he then wish to take a privilege, he must decide before the next stroke be made, otherwise he cannot take it without consent of all the players.

14. In taking a privilege, the player has a right to draw a new private ball, and of then choosing between that and his original ball; but he must decide quickly, which ball he will keep, before the next stroke be made.

15. New privileges can be taken by players that are bursted, as often as there are bursts in the game.

16. Each privilege follows the last number in rotation. For instance: if there are six playing, and one be bursted, he succeeds No. 6, and becomes No. 7; if another becomes bursted, he succeeds as No. 8; and if it be the highest number that is bursted, he plays on immediately after choosing his private ball.

17. If the balls *touch*, or be in contact with one ano-

ther, the striker has a right to play with either of the balls, so touching, straight at the pins, without striking another ball, and any pins he may knock down, count good, except in such cases as do not conflict with rule 19.

18. Any pin knocked down by jarring the table, blowing upon the ball, or altering or intercepting its course in running, does not count, nor is the player entitled to any pin or pins that may be made by any other ball, though not interfered with during the same play.

19. Should a ball jump off the table, and come in contact with a player, or any other person, and fall back on the table and knock down pins, such pin or pins so knocked down, shall not count, and the ball must be spotted; but if another ball gets pins by the same stroke, the pins so made by that other ball are good.

20. If a player makes pool, and he should at that time have more than one private ball in his possession, he is not entitled to the pool, but is considered bursted.

21. The player, in this game, as in Billiards, has the sole right of looking after his own interests, and neither the game-keeper, or any of the by-standers, have any right to dictate to, or advise him, unless by consent of all the players.

22. The game-keeper is not responsible to the winner of a pool for more than the actual amount of stakes received from the players in such pool.

23. It is the duty of the game-keeper to collect the stakes, and make up the pool—to deal out the small balls to the players—to see that the balls and pins are properly spotted—that there are no more private balls out than there are players in the pool,—and if any such balls are missing, to proclaim its number to the players, as the pool cannot be won by such ball,—to call out each number, in its turn, to players—to proclaim, long enough for them to hear it, the number they may already count from pins knocked down,—and to have all pins properly knocked

down, placed to the credit of the respective players, who may have made the stroke.

---

### FIFTEEN-BALL POOL.

THE rotation of the players is decided as in Two-ball Pool. It is played according to the following rules:

Fifteen balls, marked and numbered from 1 to 15, are arranged in the form of a triangle, touching one another; for this purpose a triangular frame is used, so as to insure exactness, the base of the triangle being parallel with the end or foot cushion of the table. The highest number, (15,) is placed on the deep red spot, thus bringing the apex of the angle in a direct line to the upper or light red spot.

The object of this game is to pocket the balls, and as each ball is holed it is scored by the player. When the balls are all pocketed, each player adds the numbers on his balls together, and the highest number wins the pool.

The white ball is the only ball to be played with in this game. This is an excellent game for the novice, in which to practice and render himself familiar with hazards.

The following rules are generally observed in this game:

1. The striker plays from the string, and has the privilege of missing, or hitting, as he pleases.
2. Making a miss, pocketing your own ball, or causing it to jump off the table, is a penalty of three points, to be deducted from the sum of the score made by the player.
3. There are no foul strokes in this game, as a hazard is good even if the balls touch, unless the striker impede or interfere with the running of the balls.
4. Should the player pocket his own ball, and at the

same time hole one or more of the numbered balls, the balls so holed shall be placed on the spot, and the player gains nothing from the balls so holed, but, on the contrary, loses three points.

5. Should the spot be occupied by another ball, it must be placed as near the spot as possible, in a line behind the balls so occupying the spot.

6. The white ball, when in hand, may be played from any part of the string, and at any outside the string.

7. The striker has a right to use the butt of his cue, or a mace, if he so choose, and push the balls with them.

8. All the balls added together amount to 120, consequently, he, who first makes 61 points, wins the game, and is entitled to the stakes.

9. Should there be a tie between the two highest players, it is to be decided on the next game, and the one of those two, counting the highest, wins, regardless of the game then playing.

10. When but one ball remains on the table, and that in the string, the player, if his ball be in hand, has the privilege of spotting the former on the deep red spot, and playing at it while in that position.



## A PAUSE BEFORE OUR PICTURES.

WE have now concluded the critical and theoretic portions of our work, and we beg the reader's attention to the practical. We will illustrate the principles we have stated, and present him with perfect diagrams, to explain our assertions. Those diagrams we have prepared with infinite labor and care; we flatter ourselves, that our labor and care have not been vain. Any student, of ordinary capacity, can understand the former portions of the work, if he attentively collates with this.

One other word on this subject:—Though we have done all that art *could* do to facilitate the study of Billiards, we are convinced that nothing short of absolute practice, frequent and attentive practice, can enable any person to be a master of the science. He may understand the principles of the game without being qualified to make a simple hazard, but he never can rank as a player because he is deep-read in the rules and principles; he must, in addition, handle his cue and learn from experience.

And furthermore, the presence and assistance of a capable and intelligent player as tutor, is almost necessary in the beginning. A player's success depends upon his first efforts. If he learn bad habits early, he will retain them in after times, and little short of the experience of a matured and practised person could prevent him from acquiring them.

In conclusion, I can say to those readers, who may be terrified by the apparent impossibility of some of the strokes illustrated in the diagrams, that they are by no means impossibilities, but within the reach and capacity of all to whom God has given a clear head, a keen eye, and a firm hand. All the strokes, which I instance, I not

only have seen played, but have *played* myself, and I stake my reputation on the fact, that I can play the most difficult of them again, with perfect success. Of course, I could not succeed on every occasion. The mechanical action of Billiards depends very much on the condition of your constitution, and the strength of your nerves, and on the state of your temper also. For there is an innate sympathy between the head and hand, and if your brain is confused, (in Billiards, at all events,) your hand cannot be steady. On this account I do not pledge myself to make the strokes, represented in the diagrams, with *invariable* success. I may often fail, but I do assert, that I would have more than average success.

## EXPLANATIONS OF THE PLATES.

---

### FIGURE 1—PLATE A.

THE ball described and delineated in figure 1—plate A, supposes the face of the ball to be towards the reader.

The ball is divided by a line running perpendicularly through the centre, by one horizontally, and by two other lines diagonally, thus dividing the intermediate spaces, and making eight equal sections of the ball. The perpendicular line is marked off by quarters, and the horizontal line by eighths, and the diagonal lines by halves.

The horizontal is marked off to the left of the perpendicular by eighths, and the right by quarters.

By drawing concentric circles at any distance from the centre, it will be found that the various circumferences will intersect at the various figures on all the other lines, as laid down—according as the lines are drawn. As for instance: a line beginning at the quarter mark from the centre of the perpendicular line, will be found to intersect all the other horizontal and diagonal lines, and so with any given point on that or the other lines.

The ball is susceptible of more minute divisions into sections, and of circumscribing smaller lines—but the above will be found sufficient for all practical purposes. This ball is the key to all strokes, described in this work, and will be referred to in all explanations of the succeeding diagrams, in connection with plate B, descriptive of the Quantities of Strength.

But the author would here state, that almost any twist or degree of motion may be applied to the ball without

striking outside of the half-circle—provided, the player has a proper command over his cue, and is capable of communicating the peculiar motion necessary to accomplish the stroke—playing at any point outside the half-circle, renders him liable to a miscue, and gives him less control over his ball. To perform the required stroke, an instinctive quality of discerning at a glance the exact distance of the ball, the degree of strength required, the point to be struck, all combined with and assisted by an intellect sufficient to perform instantly what should be done, and transfer the conception of the brain to the lifeless and inanimate ball—are all imperatively necessary.

To prevent misunderstanding on the part of the student, the author will refer in his instructions to the subjoined key:

The points of intersection formed by the several circles with the horizontal, diagonal and perpendicular lines, are those which we refer to, for the sake of illustration, in the following pages. There are many other points, it is true, by striking which you can give different motions to the ball. We have not marked them, being anxious to avoid all confusion and complaints. We will mention them incidentally, and say all that need be said on the subject. Our hypothesis is, that the points marked in the diagrams are the points struck. For instance: when directing the player to strike one quarter right, we mean one quarter to the right of the centre on the horizontal line—and by one quarter below, we mean that the intersection of that circumference with the diagonal line, is the point to be struck.

For the sake of abbreviation, the points will be distinguished as  $\frac{1}{4}$  R. and  $\frac{1}{4}$  B., meaning thereby one quarter right, and one quarter below.

$\frac{1}{2}$  R. and  $\frac{1}{2}$  A., meaning one half right, and one half above. L will stand for left, A for above, B for below, R for right.

The student will perceive, that the double lines, on the right of ball A, numbered 1, 2, 3, 4 and 5, are meant to represent cues in the position necessary to effect certain strokes there named.

*Example No. 1*—Represents the cue in the position it should be held, to effect what may be termed a perpendicular force, the effect of which is to cause ball A to recoil, but not to so great an extent as if it were struck below the centre, as is represented by the cue marked No. 5.

NOTE.—Although this stroke is not often played in Billiards, except by very good and practised players, still, at times, it may be of great utility to know how to accomplish it.

For instance: the player's ball may be so situated between two other balls, that he is compelled to effect this stroke in order to make a carom. To make the stroke properly, the cue should, after a proper aim has been taken, be delivered with a sort of jerk, and instantaneously withdrawn. A proper command should also be obtained over the cue, so as not to strike the table after delivery, thereby rendering the cloth liable to be torn. This stroke, though difficult, can be attained, like any other, by practice.

*Example No. 2*—Represents the cue in the position necessary to effect what is called a jump or hop.

*Example No. 3*—Represents the cue in the position necessary to effect a "following" stroke. The point of the cue is somewhat elevated above the horizontal line, which is usually done by contracting the fingers of the left hand, thereby slightly raising the natural bridge. This gives sufficient elevation to apply the proper motion to effect a following stroke, and can be graduated by a little practice on the part of the player.

*Example No. 4*—Represents the cue in the position requisite to effect the central stroke. This simplest of all strokes requires no explanation.

*Example No. 5*—Represents the cue in the position proper to effect a Force. The motion applied to the ball by this stroke is at the same time progressive and revolving; said ball coming in contact with another ball of equal weight, the progressive motion is imparted to that ball, and the revolving motion alone remains, thereby causing the ball first played to recoil.

*“Like a hoop thrown off  
From the school-boy’s finger,  
By a curious knack  
In the very throwing,  
You compel it back  
While you set it going.”*

#### FIGURE 2—PLATE A.

By referring to figure 2—plate A, the reader will perceive the course which the object ball will pursue, after being struck by what is called, in Billiard parlance, a Full, Quarter, Half, or Fine ball.

The ball A, when striking the ball B, in any point away from the centre, or where the line marked “full ball” intersects the circle, causes the ball B. to fly off at an angle, greater or less, according to the divergence from the last-mentioned line.

This figure is the whole key to hazards, and renders easy of solution all strokes played for that purpose. The player may facilitate his exertions by drawing an imaginary line with the eye, from the centre of the pocket through the centre of the object ball, and where that line terminates is the exact point, at which you must strike to accomplish the hazard. We have omitted all regular lessons on hazards—solely because they are too simple and easy of execution to require a detailed explanation. By following the rules laid down, and studying the diagrams, a novice even can make them;

# Plate A

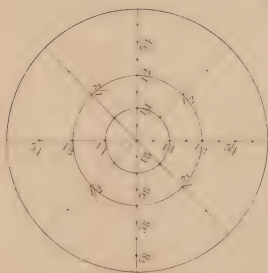


Fig. 1



Fig. 2



Fig. 3

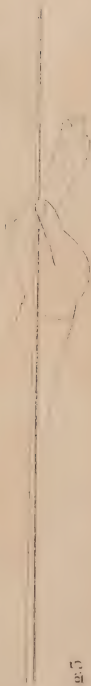


Fig. 4





and it would be only a waste of time and labor to enter into the subject at greater length.

FIGURE 3—PLATE A.

This figure represents the manner in which the natural bridge is formed, and the peculiar way in which the cue should be held. To accomplish the first, the figures should be moderately pressed together, the thumb brought firmly up to the forefinger, thus forming a groove, in which the cue may be rested; the wrist and points of the fingers should be moderately pressed upon the table, thus making the bridge represented in the plate, and giving it strength and solidity besides. The cue should be held as nearly horizontal as possible, in all ordinary strokes.

## CHART, OR SCALE OF STRENGTH.

ONE of the greatest difficulties the author has found in the course of making up this publication, has been, that no scale of the different degrees of strength required to be used in executing any given stroke, has as yet been given for the guidance and information of the Billiard playing public.

In his own experience he has found this a great impediment while instructing novices in the mechanical execution of the game. For instance, if an instructor should tell a pupil that he had failed in his attempts to accomplish a certain stroke, because sufficient strength had not been used, and should tell him to play harder, the pupil may ask how much harder? All the instructor can say, is, to play a little harder, or considerably harder, or very hard. In such cases, of the degree of strength necessary, a great deal must be left to the imagination of the pupil. To supply this gap, or deficiency, the annexed chart or scale of strength has been needed.

The student will find this table of the Quantities of Strength necessary to impel a ball over a given space, of great assistance to him in understanding and executing the strokes described in the annexed diagrams.

The author has designed this chart from actual practice, and has considered the degree of strength necessary to propel a ball from the stringing line to the cushion, and thence to the opposite cushion, as *Quantity No. 1.*

To propel it from the same line to the cushion, thence to the opposite cushion, and from thence opposite the side pocket, as *Quantity No. 2.*

To propel it from the same line to the cushion, thence to the opposite cushion, and back to the first cushion struck, as *Quantity No. 3.*

To propel it from the same line to the cushion, thence to the opposite cushion, and back to the first cushion

Quantity No 1

Quantity No 2

Quantity No 3

Quantity No 4



struck, and from there opposite the side pocket, as *Quantity No. 4.*

The Quantity of Strength necessary for stroke No. 1, can be graduated as far below as one eighth of that quantity, which is low enough for the practical purposes of the novice; from thence he can rise in the proportion of eighths to stroke No. 4, above which he can rise so far as his strength, skill, and muscular powers will admit, though at the risk of placing the balls beyond his control, and losing his command over them.

## EXPLANATION OF PLATE No. 1.

THIS plate is intended to show the simple angles produced by a ball played from certain points of the table.

*Example No. 1.*—Play a ball over line 1, with Q. S. 1, and it will return over the same line.

*Example No. 2.*—Play a ball over line 2, with Q. S. 2, and it will return over line 2 to the corresponding nail on the opposite side.

*Example No. 3.*—Play a ball over line 3, with Q. S. 3½, and it will return over line 3 to the pocket.

NOTE.—The ball is started from the lines at the points where the figures 1, 2, and 3 are placed.

*Example No. 4.*—Play a ball from either pocket, with Q. S. 4, over line 4, and it will return over line 4 to the other pocket.

*Example No. 5.*—Play a ball from near the base of line 5, with Q. S. 3, and it will return over line 5.

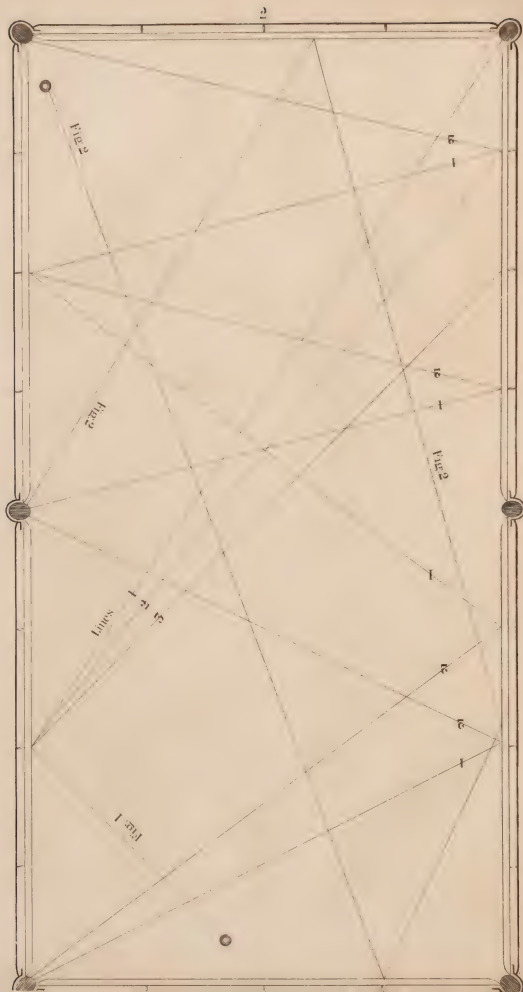
NOTE.—It will be observed, that the more obtuse the angle formed, the greater the quantity of strength required, and it must be borne in mind, that unless the proper degree of strength is employed, the described angles will not be correctly produced. For further exemplification of which, see plate 2—figure 1.











## EXPLANATION OF PLATE NO. 2.

*Figure 1*—Shows the difference in the course of the ball, according to the degree of strength used.

*Example 1.*—Play the ball with Q. S. 1, and it will roll over line 1 in the direction of the corner pocket.

*Example 2.*—Increase the strength to Q. S.  $2\frac{1}{2}$ , and it will roll over line 2.

*Example 3.*—Increase the strength to Q. S. 4, and it will roll over line 3, forming an exact right-angle.

NOTE.—But no increase of strength beyond that applied to line 3 can reduce the angle formed by the ball below the dimensions of a right-angle.

*Figure 1, Line 3*—Forcibly exemplifies and explains the correctness of Cloth Cushion Tables; all other cushions, as elsewhere spoken of in this book, baffle and bewilder the calculations of the most skillful players. No specific rule can be made with regard to elastic, or Indian rubber cushions; for you can be certain of no angle, when playing on such. And as we have mentioned this subject, we take this opportunity of saying, that the best players in the United States—all those, who are scientific, not random or “scratch” players—agree with us in believing, that the cloth cushions are the safest, fairest, and best. (See appendix.)

*Figure 2.*—Play a ball with Q. S. 4, and it will traverse the lines laid down, and go in the side pocket next the point from whence it started. The lines, marked 1 and 2, show the simple results produced when the ball is played with a proper strength, and without any twist or side stroke, and by playing a ball over any of these lines, it will return over line 2.

NOTE.—It would be well for the pupil to exercise himself thoroughly in practising the simple angles, from various points of the table, as here delineated—at the same time forming angles of his own conception, and noting well the quantity of strength necessary to produce them.

## EXPLANATION OF PLATE NO. 3.

*Figure 1—Example 1.*—Play the ball with half Q. S. 1, at the quarter nail outside the string, and it will roll over line 1 to the cushion, and will rebound over the continuation of that line.

*Example 2.*—Play the ball with Q. S. 3, at the same point, and it will traverse line 2, and continue over that line to the opposite side pocket.

NOTE.—The first example of line No. 1 is a consequence of the ball as played, without any artificial aid from a twist or side stroke. But line No. 2 is accomplished by a *twist*, acquired from the side cushion by the increased strength necessary to that play. This twist is explained as follows: The ball, when played with increased strength, and in the direction delineated, against the cushion with a rotatory motion, when coming in contact with the side cushion, is *griped* by it, and the motion is thereby changed to a twisting or spinning one on its perpendicular axis; although the progressive motion is not perceptibly diminished or retarded. It then strikes the end cushion at a less obtuse angle than line No. 1, and rebounds from thence, traversing line 2 to the side pocket. This apparent divergence from a correct angle is caused by the last described motion of the ball coming in contact with the end cushion, and acquiring a new motion from the moment of leaving it. This new motion is different and distinct from the previous one, inasmuch as the ball retains the progressive motion, and rotates at the same time on its horizontal axis.

*Figure 2.*—Play the ball from the point delineated, with Q. S. 4, at the end cushion, and it will traverse the lines laid down, and marked figure 2, and roll in the corner pocket.

NOTE.—It is unnecessary here to describe the various motions and changes of axis the ball undergoes in its

Line 1

Line 2

Fig. 2

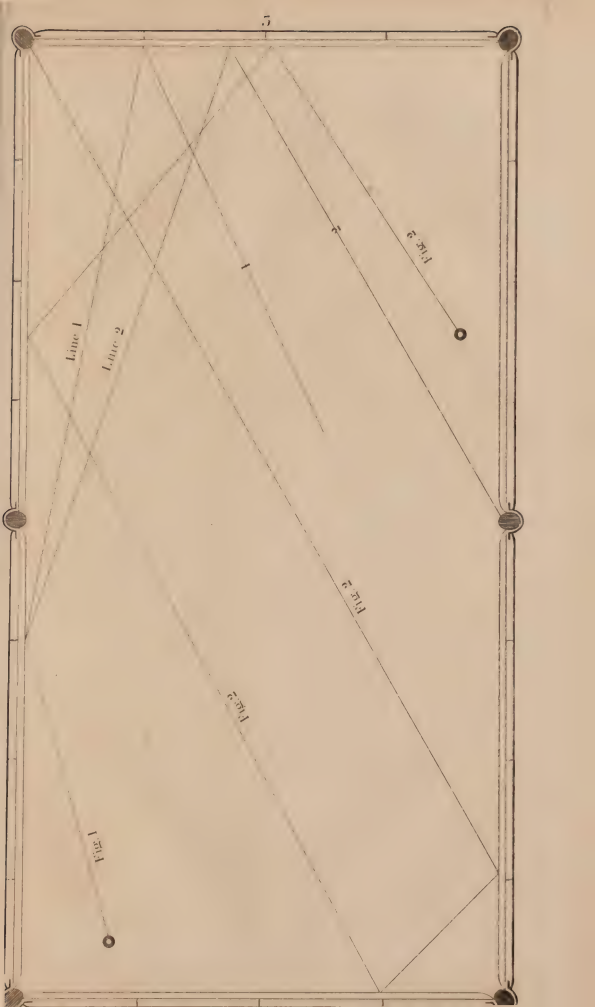
2

1

Fig. 2

Fig. 2

Fig. 1





course before reaching the pocket. These motions and changes are sufficiently described in Note to figure 1, although it must be evident, that each time the ball strikes the cushion, its motion and axis are changed; but it must also be observed, that as the velocity of the ball becomes lessened, its motion becomes more rotatory on its horizontal axis.

## EXPLANATION OF PLATE NO. 4.

THE ball is to be played from its position as marked in the diagram at the centre nail of the end cushion, and made to rebound over lines 1, 2, 3, 4, 5, 6, 7, 8, and 9, at will, without changing position.

*Example 1.*—To make it return over line 1, strike the ball exactly in its centre with Q. S. 2.

*Example 2.*—To make it return over line 2, strike the ball on a direct horizontal line  $\frac{1}{8}$  to the right from its centre, with Q. S. 2.

*Example 3.*—To make it return over line 3, strike the ball  $\frac{3}{8}$  R, and  $\frac{1}{4}$  B, with Q. S. 2.

*Example 4.*—To make it return over line 4, strike the ball  $\frac{1}{2}$  R, and  $\frac{3}{8}$  B, with Q. S.  $1\frac{1}{2}$ .

*Example 5.*—To make it return over line 5, strike the ball  $\frac{1}{4}$  L, on a direct horizontal line from the centre, with Q. S.  $1\frac{1}{2}$ .

*Example 6.*—To make it return over line 6, strike the ball  $\frac{1}{4}$  L,  $\frac{1}{8}$  B, with Q. S. 2.

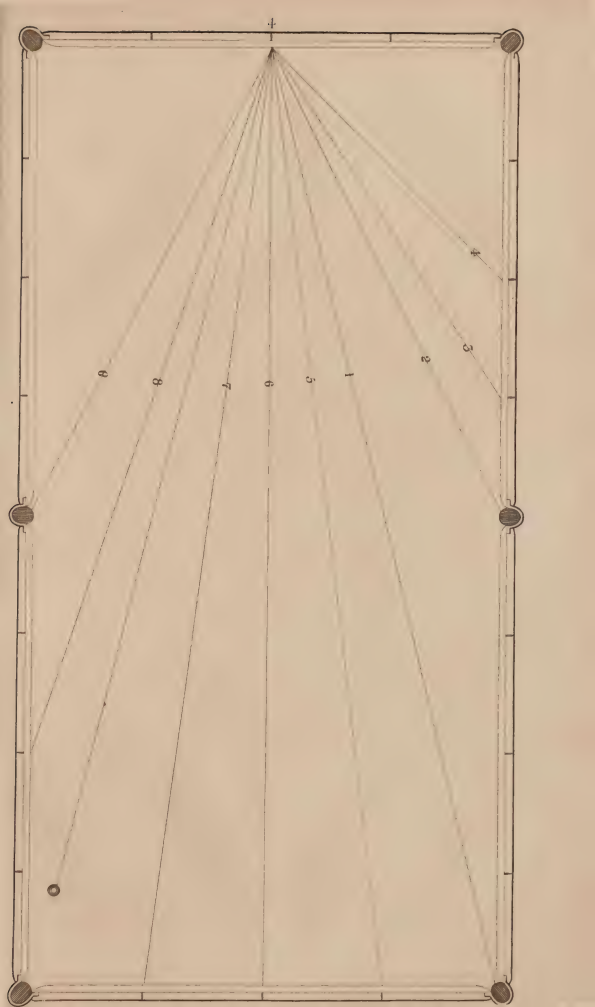
*Example 7.*—To make it return over line 7, strike the ball  $\frac{3}{8}$  L,  $\frac{1}{4}$  B, with Q. S. 2.

*Example 8.*—To make it return over line 8, strike the ball  $\frac{1}{2}$  L,  $\frac{1}{2}$  B, with Q. S. 2.

*Example 9.*—To make it return over line 9, strike the ball as much below the centre and as much to the left as possible, without making a miscue, with Q. S. 2.

NOTE.—If the student should succeed in drawing his ball over the 9th line, he may consider he has achieved a great feat, as it requires a *tremendous twist*, and the greatest command over the ball and cue to accomplish it. By striking the ball below the centre, it has a tendency to lessen its velocity, and allows sufficient time to elapse to permit the full development of the twisting motion caused by the side stroke, and to have its full effect on the cushion, thereby causing it to return







over line 9. To accomplish this, the cue must be perfectly leathered, and well chalked, in order to take hold of the ball.

#### GENERAL REMARKS ON PLATE 4.

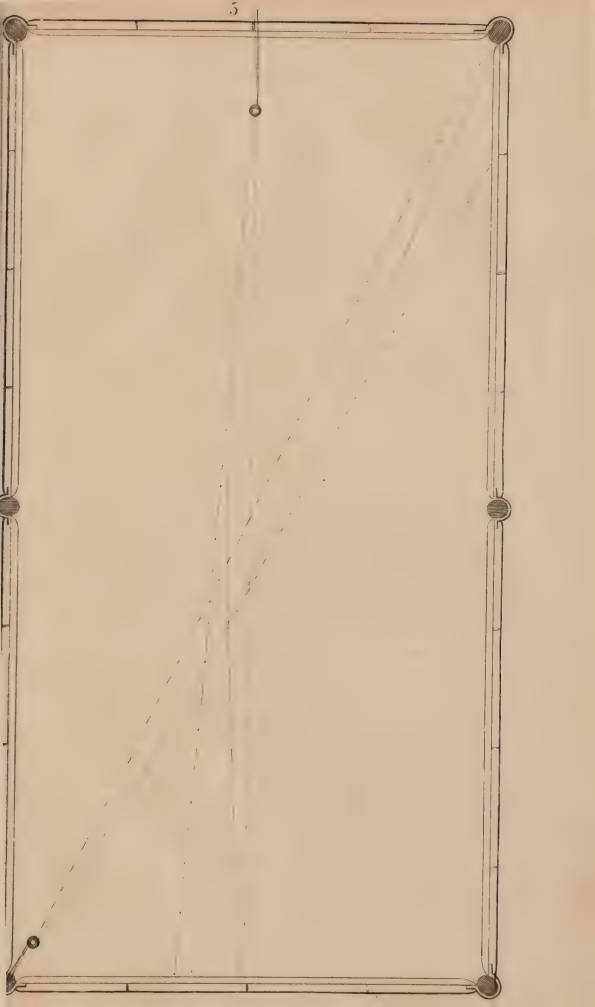
This plate, though simple in appearance, is one of the most important in this collection, as by a careful and assiduous study of it, the principles of imparting the different motions to the ball are explained and illustrated. It is also intended to show the immense advantage the adept at twisting strokes would have over the player, who only knows how to make straight or old-fashioned ones. Observe for a moment the natural angle formed by line No. 1, and compare therewith all the artificial angles which can be formed with the aid of the twist, and you will appreciate the advantage we refer to.

## EXPLANATION OF PLATE NO. 5.

THIS plate exemplifies the necessity, in playing a long twisting stroke, of making a proper calculation of the alteration of the course of the ball arising from such play.

*Example.*—Play either ball, as delineated in this plate,  $\frac{1}{4}$  L and  $\frac{1}{8}$  A, with Q. S. 2, at the same time elevating the butt of the cue about 10 degrees, in giving the stroke, and the ball will continue in a straight line to that point, where the dotted line begins—from thence it travels on a curved line its appropriate course. The dotted line shows what would have been its course had not the twist been applied, and a central stroke only given. The twisting force begins to display itself at the junction of the dotted line, and from thence develops itself in its onward course. The straight dotted line, commencing at the ball, is intended to show the base of the curve, and the black line, the divergence of the ball, caused by the motion imparted to it.

NOTE.—This may be considered an extreme case, for the twist may be communicated without elevating the cue; but by the elevation, as described, the curve will be greater. The fact of striking the ball one quarter left, without the elevation, causes the ball to spin round on an axis perpendicularly disposed, but, by the elevation, the axis becomes diagonally disposed, which occasions a greater curve, or gives the ball a greater approximating force towards the line of the base, (the straight dotted line marked in diagram.) The ball is doubly influenced, or has two distinct motions communicated to it—progressive and twisting. When the ball leaves the cue, the former is too powerful for the latter, which has slight effect until the ball has run some distance, consequently the ball proceeds for some time in the direction indi-





indicated by the first part of the black line, (as on diagram,) but as the spinning motion becomes more developed, combined with the gravity of the ball itself, and the resistance offered by the bed of the table, the inclination to approximate, caused by the twisting on a diagonal axis, becomes paramount, and the ball inclines thenceforward to the line of the base, in the direction indicated by the continuation of the black line. .

## EXPLANATION OF PLATE No. 6.

HAVING, in the preceding plate, shown the effect of a twisting motion on a ball, we will now explain how a "following" and a "forcing" stroke are effected.

*Figure 1.*—This is a stroke very simple in its execution. Strike your ball  $\frac{1}{4}$  B,  $\frac{1}{8}$  L, Q. S.  $2\frac{1}{2}$ , and play to hole ball 1 in the corner pocket, as delineated in the plate, and your own ball will recoil to the position of ball 2.

*Figure 2.*—This is a simple following stroke. Strike  $\frac{1}{4}$  A,  $\frac{1}{8}$  R, with Q. S.  $2\frac{1}{2}$ , and play as above. It will be observed, that in these two figures, the motion of the striker's ball, after coming in contact with the object ball, is nearly the reverse, in those two strokes.



FIG. 1

1

2

12

FIG. 2

1

12







## EXPLANATION OF PLATE NO. 7.

To hole ball 1 in the right hand corner pocket, and carom on No. 2, it is necessary to strike your own ball  $\frac{1}{4}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{3}{4}$ . This plate delineates what are called false angles, or angles varying in dimensions from true angles, and caused by the peculiar or twisting motion communicated to the player's ball by the cue. Had not this motion been communicated, and had the ball pursued its natural course, the line of the ball would have been as much to the right of the centre nail as it is now delineated to the left, and the other lines would have varied in like manner.

## EXPLANATION OF PLATE NO. 8.

To effect this carom, it is necessary to strike your own ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  A, with Q. S. 3, and your ball will describe false angles, as explained in plate 7.











## EXPLANATION OF PLATE No. 9.

To effect this carom, it is necessary to strike your own ball  $\frac{1}{2}$  L,  $\frac{1}{4}$  A, with Q. S. 3. Ball 1 is to be struck about a half-ball R, and your ball will describe the angles laid down, and carom on ball 2.

## EXPLANATION OF PLATE No. 10.

To effect this carom, strike your ball  $\frac{1}{4}$  B,  $\frac{1}{8}$  R, with Q. S.  $3\frac{1}{2}$ , and your ball will describe the angles laid down, and carom on ball 2.

NOTE.—This may appear to be travelling a useless distance to effect what might be done by a kiss or forcing shot, but it is intended to show how the speed of the ball may be accelerated after striking a cushion, by reason of the ball being struck below the centre; and it also shows how the angles may be contracted, as will be more fully explained in plate No. 16.

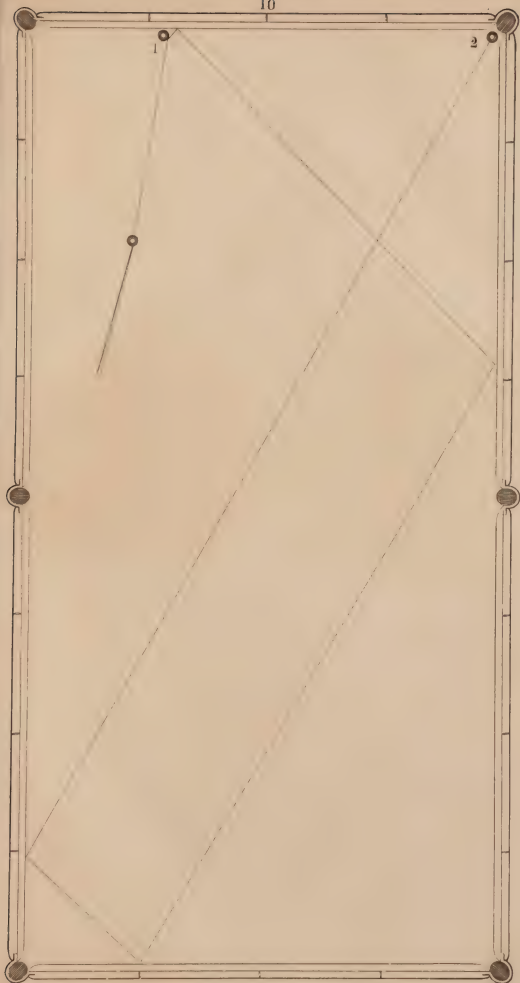
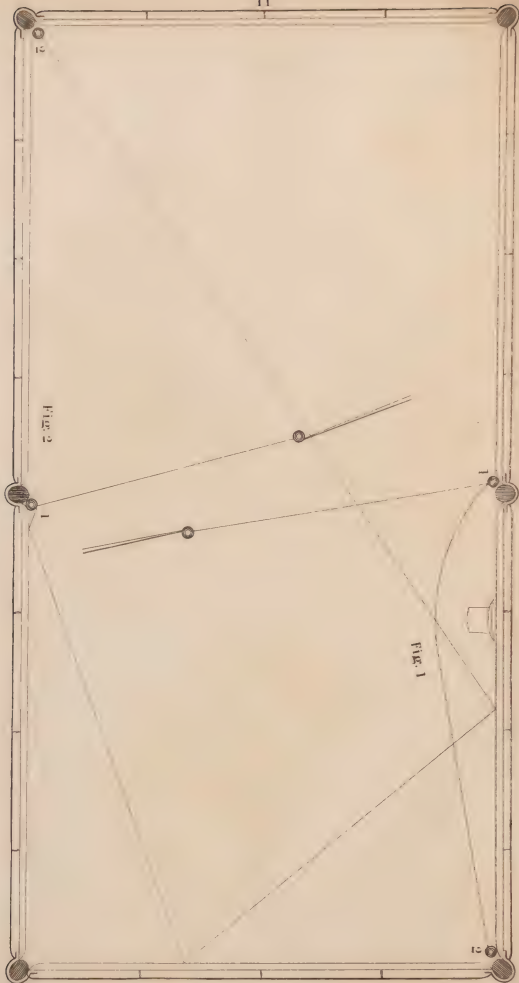






Fig. 2

FIG. 1





## EXPLANATION OF PLATE NO. 11.

In this plate, in figures 1 and 2, the balls are in the same position. It is intended to show that balls 1 and 2 can be caromed on, and holed in the same pocket in different ways.

*Figure 1—Example 1.*—Play your ball against ball 1, at the side pocket, so as to effect a kiss, and carom on ball 2. To accomplish this, ball 1 is to be hit  $\frac{1}{4}$  R, and your own ball to be struck  $\frac{1}{2}$  A,  $\frac{1}{8}$  R, with Q. S. 3, and the ball will form a curve sufficient to clear a hat placed against the side cushion, in the position delineated on the plate, and carom on No. 2.

NOTE.—The cause of the various motions of your own ball is explained as follows: Struck in the manner described, your ball rotates on a horizontal axis, until it comes in contact with ball 1, at which point, owing to the elasticity of the cushion, it rebounds or “kisses” off, but it retains the rotatory motion, which struggles with the rebound for some time, and finally overcomes it so as to describe the curve represented, and carom on ball 2.

*Example 2.*—Play your ball  $\frac{1}{2}$  L,  $\frac{1}{8}$  B, with Q. S. 3. Ball 1 is to be struck a fine ball to the left, and your own ball will take three cushions following the lines laid down, and will carom on ball 2.

NOTE.—Ball 1 is hit fine, and your own ball travels some 18 feet to effect the same object, which is accomplished in figure 1, by its travelling about 6 feet. In figure 2, your own ball undergoes various changes of motion, on an axis variously disposed, before it comes in contact with ball 2. Thus, in traversing from the cue to ball 1, it has two distinct motions imparted to it, namely, the progressive and twisting, on an axis diagonally disposed; when it strikes ball 1 a change in the disposition of the axis immediately takes place—it inclines more to the perpendicular, and after its contact with the first

cushion, it is more perpendicular still. Two distinct effects result here from the twist—first, the progressive motion acquires a greater impetus, or rapidity; and, secondly, the angle of divergence is more obtuse. The same result takes place in its contact with the second cushion as far as the angle of divergence is concerned, but the speed is abated, and when it comes in contact with the third cushion, its axis becomes by degrees horizontally disposed, and its speed abates, until it reaches ball 2, when the axis is perfectly horizontal.

In this and plate 47 is proved, to a certain extent, the assertion in the text, namely, that, in the game of Billiards, there is a susceptibility of having the results produced by a variety of ways, and different strokes.



Fig. 2

Fig. 3

## EXPLANATION OF PLATE No. 12.

*Figure 1.*—To play on ball 1, pocket it in the corner pocket, rebound by the kiss on ball 2, and from thence recoil on ball 3—strike your ball  $\frac{1}{2}$  A,  $\frac{1}{8}$  R, with Q. S.  $2\frac{3}{4}$ ; ball 1 to be hit  $\frac{1}{10}$  L.

NOTE.—As in figure 1, in the preceding plate, this is effected by a “kiss.” Your ball rebounds from ball 1, still retaining the rotatory motion, and when it comes in contact with ball 2, the rebound is expended on that ball, and your ball, in consequence of the rotation above described, is compelled to return in the direction of ball 3, as represented.

*Figure 2.*—To play your ball on ball 1 with a following twist, and carom on ball 2—strike your ball  $\frac{3}{8}$  R,  $\frac{1}{4}$  A, with Q. S. 3; ball 1 to be struck dead full.

*Figure 3.*—To play on ball 1, pocket it in the corner pocket, and by a force and twist carom on No. 2—strike your ball  $\frac{1}{4}$  L,  $\frac{1}{2}$  B, with Q. S.  $3\frac{1}{4}$ .

## EXPLANATION OF PLATE No. 13.

To play on ball 1, hole it in the corner pocket, cause your ball to form a curve, clear from No 2, and carom on No. 3—strike your own ball  $\frac{1}{4}$  A, on the centre, with Q. S.  $2\frac{3}{4}$ .

NOTE.—The cause of the ball taking this course is thus accounted for: The ball being struck above the centre, gives it the rotatory motion, and when striking the cushion, that motion is in a measure counteracted by contact with the cushion, but again partly develops itself when opposite ball 2, and describes the course as delineated, completing the stroke by caroming on ball 3.

3

12

1









FIG 1

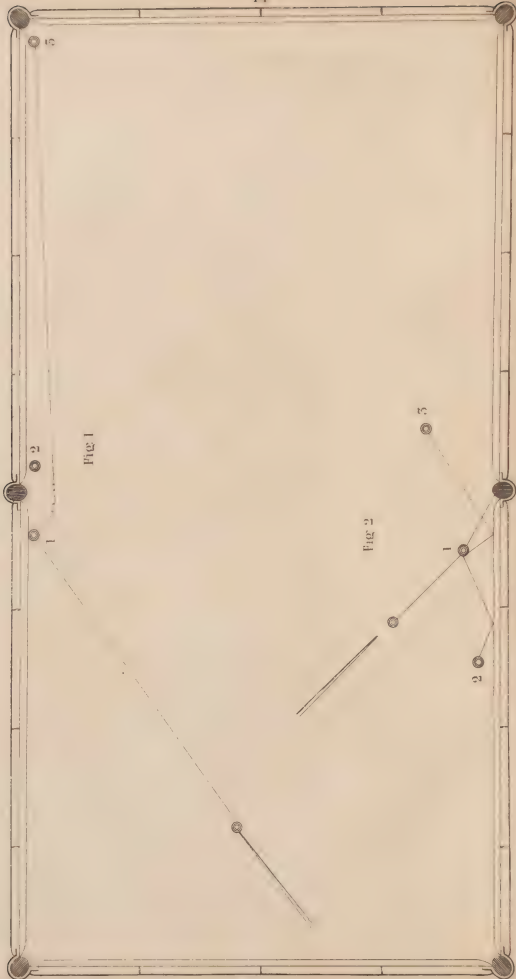


FIG 2



## EXPLANATION OF PPATE No. 14.

*Figure 1.*—To play on ball 1, describe a curve clear of ball 2, and carom on ball 3—strike your ball  $\frac{1}{4}$  A,  $\frac{1}{8}$  L, with Q. S.  $2\frac{1}{2}$ —ball 1 to be hit  $\frac{1}{8}$  L.

*Figure 2.*—To play on ball 1, hole it in the side pocket, and carom on ball 2 or 3 at will.

*Example 1.*—To carom on ball 2, strike your ball  $\frac{1}{2}$  R,  $\frac{1}{4}$  B, with Q. S. 2.

*Example 2.*—To carom on ball 3, strike your ball  $\frac{1}{2}$  L,  $\frac{1}{8}$  A, with Q. S. 2.

## EXPLANATION OF PLATE No. 15.

To pocket ball 1 in the left hand corner pocket, and carom on No. 2—strike your ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  A, with Q. S  $3\frac{1}{2}$ .







Fig 1



Fig 2





## EXPLANATION OF PLATE NO. 16.

*Figure 1.*—To play on ball 1, and carom on ball 2, by a twist and low stroke, performing a “cut” on ball 1—strike your ball  $\frac{3}{8}$  L,  $\frac{1}{2}$  B, with Q. S. 1.

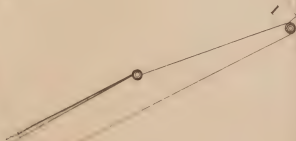
*Figure 2.*—To play on ball 1, and carom on ball 2, by the same manner of stroke as described in figure 1—strike your ball  $\frac{1}{2}$  B,  $\frac{3}{8}$  L, with Q. S. 3.

NOTE.—By applying the low stroke to your own ball, and “cutting” ball 1 fine, the angle the ball will from thence form will be so contracted as to admit of caroming on ball 2, without taking another cushion. Unless the low stroke were applied, it would be impossible to accomplish this. The reason is obvious: the revolving motion acquired by your ball from the low stroke, causes it to rebound more rapidly from the cushion, after leaving ball 1, than it would, had it been struck in a different manner. This Note applies equally to figures 1 and 2, and is alluded to in plate 10.

**EXPLANATION OF PLATE No. 17.**

To play on ball 1, "cross" it into the side pocket, take five cushions, and carom on balls 2 and 3—strike your ball  $\frac{1}{4}$  L,  $\frac{1}{4}$  B, with Q. S.  $3\frac{1}{2}$ —ball 1 is to be hit in a direct line drawn from the opposite corner pocket. In this plate your ball undergoes various changes in motion and axis, and is similar to figure 2, plate 11.

3  
2  
1







2

Fig. 1

1

1

1

1

Fig. 2

1

## EXPLANATION OF PLATE No. 18.

*Figure 1.*—To play on ball 1, take two cushions, and carom on ball 2—strike your ball  $\frac{1}{2}$  L, on the horizontal line, with Q. S. 3. Ball 1 is to be hit very fine in order to effect this stroke.

*Figure 2.*—To play on ball 1, take two cushions, and carom on ball 2—strike your ball  $\frac{1}{2}$  L,  $\frac{1}{8}$  A, with Q. S. 3. Ball 1 is to be hit about a half-ball to the right.

## EXPLANATION OF PLATE No. 19.

*Figure 1.*—To play on ball 1, and carom on ball 2—strike your ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  B, with Q. S.  $2\frac{1}{2}$ . Ball 1 to be struck a half-ball to the left.

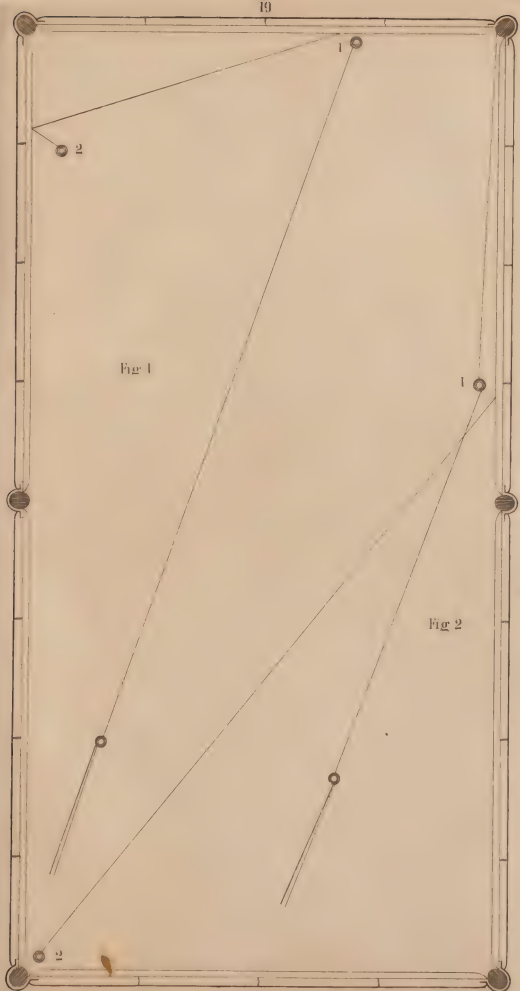
*Figure 2.*—To pocket ball 1, and carom on ball 2—strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  R, with Q. S. 4.

For Note of Explanation to figure 2, refer to plate 34, figure 1.



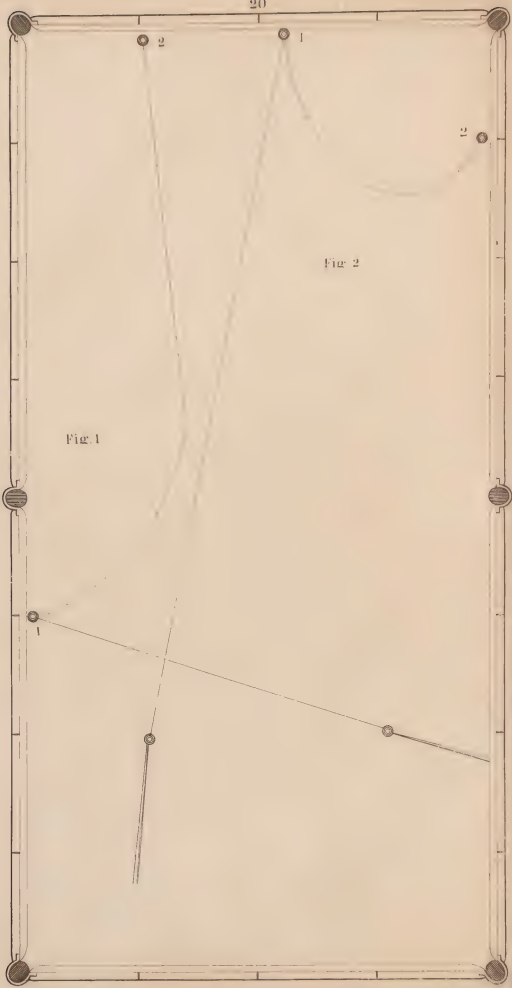
Fig 1

Fig 2









## EXPLANATION OF PLATE NO. 20.

*Examples of Caroms by a Kiss.*

*Figure 1.*—To play on ball 1, and carom on ball 2—strike your ball  $\frac{1}{2}$  A,  $\frac{1}{8}$  L, with Q. S.  $2\frac{1}{2}$ . Ball 1 to be struck  $\frac{1}{8}$  R.

*Figure 2.*—To play on ball 1, and carom on ball 2—strike your ball  $\frac{1}{2}$  A,  $\frac{1}{8}$  L, with Q. S.  $2\frac{1}{2}$ . Ball 1 to be hit  $\frac{1}{8}$  R.

NOTE.—At the moment of contact, the original course of the ball is altered from the progressive to the rebound, by the elasticity of the cushion. The rotatory motion, however, still continues, and eventually conquers the recoil, thus producing the curve delineated. Of course, the extent of the rebound is proportioned to the quantity of strength used.

## EXPLANATION OF PLATE No. 21.

To pocket ball 1 in the corner pocket, and carom on ball 2—strike your ball  $\frac{3}{8}$  L,  $\frac{1}{4}$  A, with Q. S.  $3\frac{1}{2}$ .

10

12









## EXPLANATION OF PLATE NO. 22.

To "cross" ball 1 in the opposite corner pocket, and by taking two cushions, carom on ball 2—strike your ball  $\frac{1}{2}$  R,  $\frac{1}{8}$  B, with Q. S. 3.

## EXPLANATION OF PLATE No. 23.

*Figure 1.*—To pocket ball 1, and carom on ball 2—strike your own ball  $\frac{1}{2}$  A,  $\frac{1}{4}$  L, with Q. S.  $3\frac{1}{2}$ .

NOTE.—This is another example of a twisting shot, and effecting a carom by describing a curve.

*Figure 2.*—To effect this carom, strike your own ball  $\frac{1}{2}$  A,  $\frac{1}{4}$  L, with Q. S.  $2\frac{1}{4}$ . The object ball is to be hit a quarter-ball, right.

NOTE.—Here again, as described in other plates, may be observed the effect of the rotatory motion acquired by the striker's ball, from striking it above the centre.

1

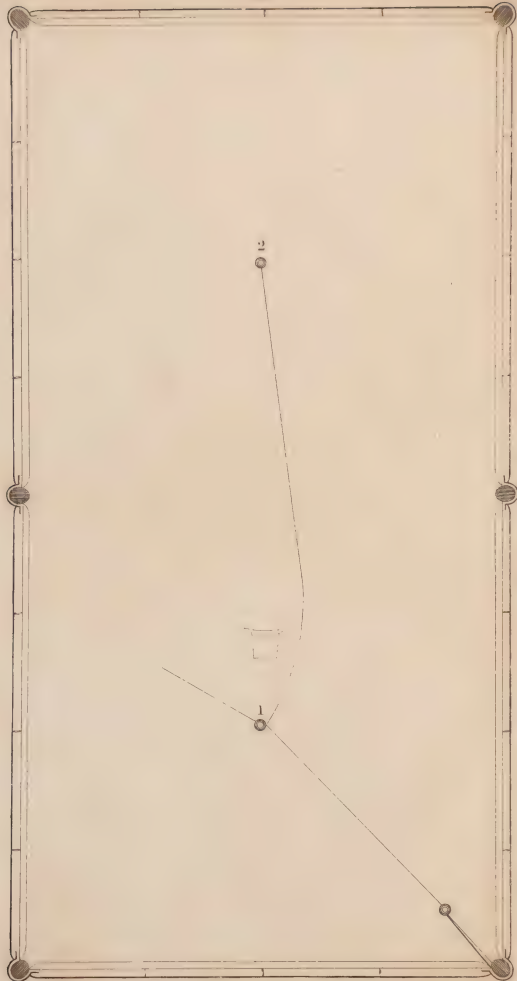
12

Fig. 1

Fig. 2









## EXPLANATION OF PLATE No. 24.

THIS is the celebrated Hat shot, that good players are so often called upon to make. A hat is placed in position as represented in plate; balls 1 and 2 are placed on their appropriate spots; to carom on those balls by forming a curve around the hat, strike your own ball  $\frac{1}{4}$  A,  $\frac{1}{4}$  L, with Q. S.  $2\frac{1}{2}$  to 3. Ball 1 is to be hit so as to cause it to take the course of the line projecting from it, on the left.

## EXPLANATION OF PPATE No. 25.

*Figure 1.*—To pocket ball 1, clear ball 2 by a curve, and carom on ball 3—strike your ball  $\frac{1}{2}$  A,  $\frac{1}{4}$  R, with Q. S.  $3\frac{1}{2}$ .

*Figure 2.*—To pocket ball 1, and carom on ball 2 by a force and twist, by taking the cushion, and describing a curve—strike your ball  $\frac{1}{2}$  B,  $\frac{3}{8}$  R, with Q. S. 3. A stroke of this nature will be represented and fully described in plate 46.

Fig. 1

Fig. 2

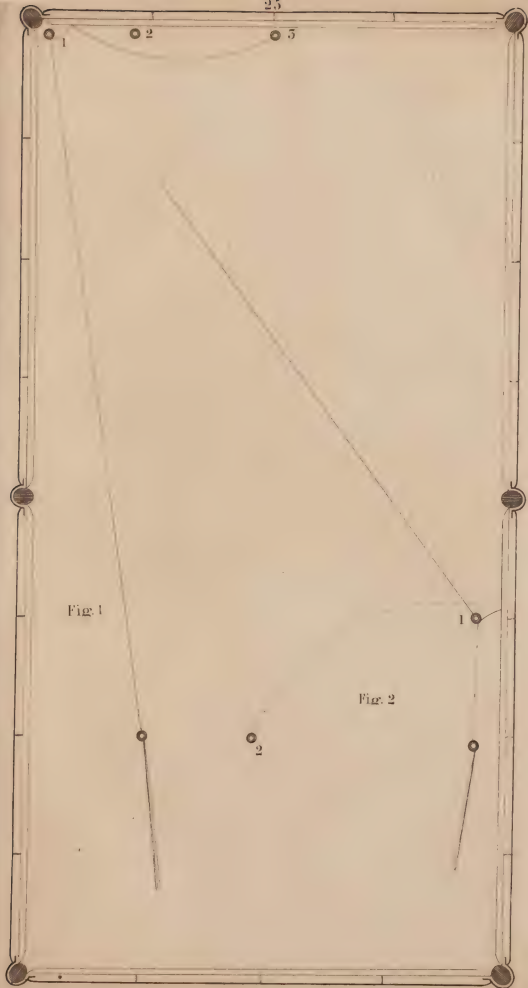






Fig. 2



4

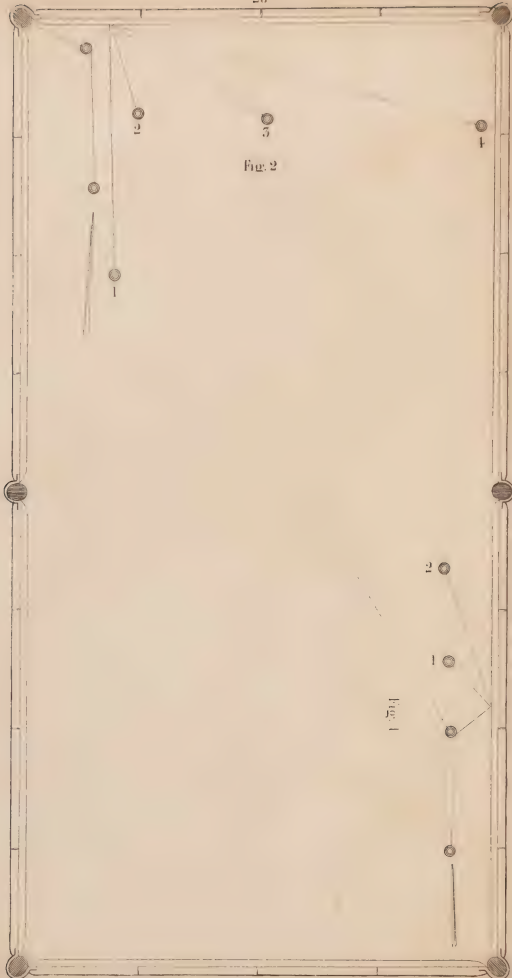
2

1

Fig. 1

3

4



## EXPLANATION OF PLATE No. 26.

THIS plate is intended to show the effect that the point of the cue will have on the striker's own ball in producing the different angles after leaving the object ball. Although the object ball in both figures is struck at the *same point*, yet it has no effect on your own ball, as that is solely influenced by the manner of striking it with the point of your cue.

*Figure 1—Example 1.*—To play on the object ball, and carom on ball 1—strike your ball  $\frac{1}{8}$  above, on the perpendicular line, with Q. S. 2.

*Example 2.*—To carom on ball 2, strike your own ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  A, with Q. S.  $1\frac{1}{4}$ .

NOTE.—The reason of less strength being required for example 2, is, to give the "twist" an opportunity of being developed before coming in contact with the cushion—were more strength used, the elasticity of the cushion would cause the ball to fly off at a more acute angle.

*Figure 2.*—To pocket the object ball, and carom on balls 1, 2, 3 and 4, at will.

*Example 1.*—To carom on ball 1, strike your ball  $\frac{1}{2}$  L,  $\frac{1}{4}$  B, with Q. S. 2.

*Example 2.*—To carom on ball 2, strike your ball  $\frac{1}{8}$  A, on the perpendicular line, with Q. S. 1.

*Example 3.*—To carom on ball 3, strike your ball  $\frac{1}{4}$  R,  $\frac{1}{8}$  B, with Q. S.  $1\frac{1}{4}$ .

*Example 4.*—To carom on ball 4, strike your ball as much to the right of the centre as possible, without making a miscue, and  $\frac{1}{8}$  B, with Q. S. 1 to  $1\frac{1}{4}$ .

## EXPLANATION OF PLATE No. 27.

*Figure 1.*—To hole ball 1 in the left hand corner pocket, and carom on ball 2—strike your ball  $\frac{1}{2}$  L,  $\frac{1}{8}$  A, with Q. S.  $1\frac{1}{2}$ .

*Figure 2.*—To effect a carom on ball 2, it is necessary to hit ball 1 a quarter ball, right—strike your own ball  $\frac{1}{2}$  R,  $\frac{3}{8}$  B, with Q. S. 2.

NOTE.—These figures are intended to show the extreme effect of the side stroke in opposite ways.

*Figure 3.*—To pocket ball 1 in the left hand upper corner pocket, and by a sudden twist, effect a carom on the other two balls—strike your ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  L, with Q. S.  $1\frac{1}{2}$ .

NOTE.—This stroke is to be effected by a short, snapping, but distinct motion of the cue. It is necessary that the cue be withdrawn from the striker's ball before it comes in contact with the object ball, otherwise it will not recoil.



Fig 2



Fig 1

2

Fig 3







1

2

3

Fig. 1

5

2

1

Fig. 2

## EXPLANATION OF PLATE No. 28.

*Figure 1—Example 1.*—To play on ball 1, and carom on ball 2, strike your own ball  $\frac{1}{8}$  A, in the centre, with Q. S. 1, and you will carom on ball 2—ball 1 to be hit one quarter right.

*Example 2.*—To carom on ball 3, hit ball 1, as above, and strike your own ball  $\frac{1}{2}$  R,  $\frac{1}{8}$  B, with Q. S.  $1\frac{3}{4}$ .

*Figure 2.*—To pocket ball 1 in the corner pocket, describe a curve line, clearing ball 2, and carom on ball 3—strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{4}$  L, with Q. S. 3.

## EXPLANATION OF PLATE No. 29.

*Figure 1.*—To play on ball 1, and by taking four cushions, carom on ball 2—strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{8}$  L, with Q. S. 4. The object ball is to be hit fine on the left.

*Figure 2.*—To carom on both balls, and hole them in the same pocket—strike your own ball  $\frac{1}{2}$  A,  $\frac{1}{4}$  R, with Q. S. 3. The object ball to be hit a trifle less than one quarter left.

Fig. 1

1

2

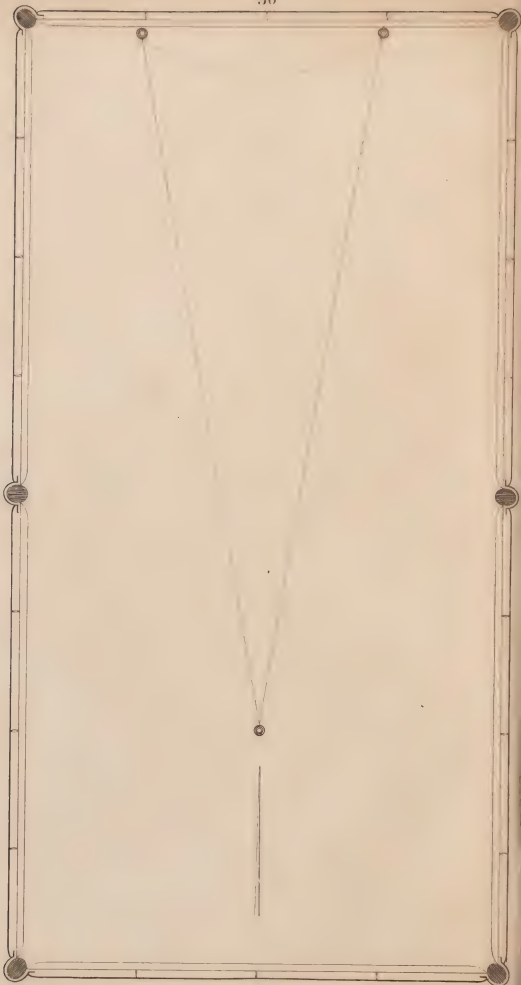
Fig. 2











## EXPLANATION OF PLATE No. 30.

To effect a carom on the balls here delineated, it is immaterial which is first played on. If you play on the ball at the right, that ball is to be hit a quarter-ball to the left, your own ball being struck  $\frac{1}{2}$  A,  $\frac{1}{4}$  R. If you play on the ball at the left, that ball is to be hit a quarter-ball to the right, your own ball being struck  $\frac{1}{2}$  A,  $\frac{1}{4}$  L. Your own ball, in both instances, is to be played with Q. S. 3.

## EXPLANATION OF PLATE No. 31.

*Figure 1.*—Place the balls as represented. The space between balls 2 and 3 to be insufficient to allow your own ball to pass through; the object is to play on ball 1, and by a “force,” carom on balls 2 and 3. This is done by causing your ball to jump moderately, so as to clear the horizontal centre of balls 2 and 3, in such a manner as to enable you to play on ball 1. Strike your ball  $\frac{3}{8}$  B the centre, the butt of the cue being elevated to an angle of about 10 degrees, (somewhat after the manner of the jumping stroke, in plate A,) with Q. S. 3.

*Figure 2.*—Play on ball 1, and by taking the cushion, clearing ball 2, carom on ball 3. Strike your ball  $\frac{1}{2}$  B,  $\frac{3}{8}$  L, with Q. S.  $3\frac{1}{4}$ .

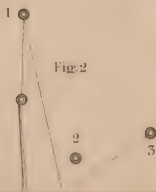
*Figure 3.*—Play on ball 1, by a kiss, forming a curve to the side cushion, and carom on ball 2. Strike your ball  $\frac{1}{2}$  A,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$  to 4. Ball 1 to be hit  $\frac{1}{8}$  L.

Fig. 3

Fig. 1

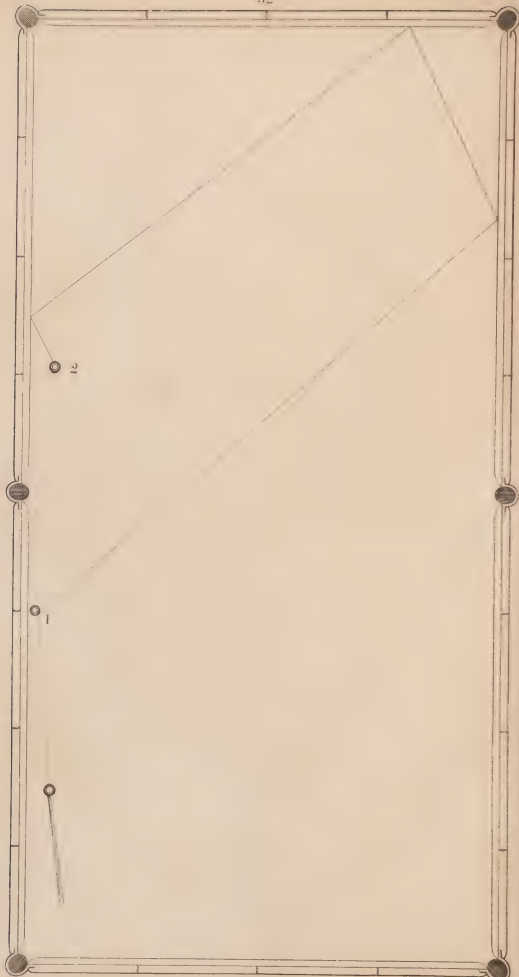


Fig. 2











## EXPLANATION OF PLATE No. 32.

To carom on balls 1 and 2, strike your own ball  $\frac{1}{4}$  A,  $\frac{3}{8}$  L, with Q. S.  $3\frac{1}{4}$ . Ball 1 to be hit from one quarter to a half-ball, right.

## EXPLANATION OF PLATE No. 33.

*Figure 1.*—This figure is intended to show the effect of a twist after a kiss. The object is to play on ball 1, kiss back to the cushion, and twist clear of ball 2, so as to carom on ball 3. Strike your own ball  $\frac{3}{8}$  B,  $\frac{3}{8}$  L, with Q. S.  $3\frac{1}{4}$ —ball 1 is to be hit dead full.

NOTE.—It will be perceived, that the course which your own ball will take after leaving the cushion, is the reverse of that, which it would have taken, had it come in contact with the cushion, at the place where ball 1 is situated.

*Figure 2.*—This stroke is intended to show, that the twist imparted to the first or striker's ball can be communicated to the object ball—although, to a very limited extent, and, as in figure 1, the effect will be the reverse, as in the case of the striker's ball, after coming in contact with the cushion. Play on the object ball dead full, and strike your own ball  $\frac{3}{8}$  L,  $\frac{1}{4}$  B, with Q. S. 2, and the object ball will rebound from the cushion, as delineated in the plate.

Fig. 2



Fig. 1

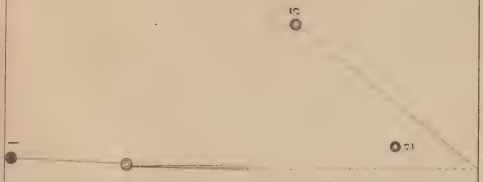






Fig. 1



Fig. 2



## EXPLANATION OF PLATE No. 34.

*Figure 1.*—To hole the object ball in the corner pocket, and by a force and twist, carom on balls 2 and 3—strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{4}$  L, with Q. S.  $3\frac{1}{2}$ .

NOTE.—In this stroke there is imparted to your ball a revolving and twisting motion, and when it comes in contact with the object ball, the revolving motion, acquired from the fact of its being struck below the centre, causes it to recoil; and when it comes in contact with the cushion, the twist acquired by striking it to the left, assists the revolving motion, and causes the ball to traverse its course as laid down. That twist, though somewhat exhausted, will then take effect on the last cushion, and the ball will describe the designated angle, and carom on balls 2 and 3.

*Figure 2.*—To pocket ball 1, “follow” on ball 2, and “force” a carom on ball 3—elevate the butt of your cue, so as to cause your ball to jump slightly; strike your ball  $\frac{1}{4}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$ . Grasp your cue firmly, and strike hard and with confidence.

NOTE.—The theory of this stroke is rather difficult of explanation, but may be thus stated: The cue being elevated, causes your ball to jump slightly, and when it comes in contact with the object ball, the chances are, that the point of contact will be above the centre of that ball. As your ball will not meet with so much resistance, as if it had struck the centre, it will have an opportunity of advancing some, before the “force” or revolving motion can prevail; and, as your ball does not probably touch the bed of the table, until the second ball be struck, it therefore cannot recoil, as there is not sufficient resistance offered for the revolving motion to produce a recoil, until after coming in contact with ball 2.

## EXPLANATION OF PLATE No. 35.

*Figure 1.*—To effect this carom, strike your own ball  $\frac{3}{8}$  R,  $\frac{1}{8}$  A, with Q. S. 2; ball 1 to be struck fine on the left.

NOTE.—The dotted line shows the course your own ball would have pursued, after coming in contact with the cushion, had it been struck in the centre.

*Figure 2.*—To play on ball 1, by a force, and carom on ball 2, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{3}{4}$ ; ball 1 to be hit a trifle to the right of the centre.

NOTE.—This is an exceedingly difficult stroke to make, and none but an expert Billiard player should attempt it, as in striking a ball so low, and playing so hard, there is great danger of tearing the cloth from a miscue.

*Figure 3.*—To effect this carom, it is necessary to play with, and be possessed of, great confidence, as it is exceedingly difficult to accomplish it. It must be effected by a perpendicular stroke and a twist. Strike your own ball  $\frac{5}{8}$  A,  $\frac{1}{2}$  R, with Q. S. 1 to  $1\frac{1}{2}$ , and elevate the cue, as in plate A, figure 2, ball A, stroke 1, marked perpendicular.

*Example 1.*—To carom on balls 1 and 2, by a twist, from a perpendicular stroke, strike your own ball  $\frac{1}{2}$  R,  $\frac{5}{8}$  A, with Q. S. 1 to  $1\frac{1}{2}$ . The cue to be elevated as delineated in figure 2, ball A, plate A, and marked perpendicular.

*Example 2.*—To play with ball 1, on ball 2, and effect a carom on the cue ball, strike your own ball  $\frac{1}{2}$  A, on the perpendicular centre, with Q. S. 1 to  $1\frac{1}{2}$ ; ball 2 to be hit dead full. The cue to be elevated, as in example 1.

NOTE.—In effecting the above strokes, care should be taken to arrest the downward course of the cue, in order to avoid coming in contact with the bed of the table, as there is great danger of tearing the cloth, and otherwise damaging it, and at the same time it requires a quick, vigorous, and impulsive stroke to apply the proper motion to your own ball, to be enabled to effect those caroms.



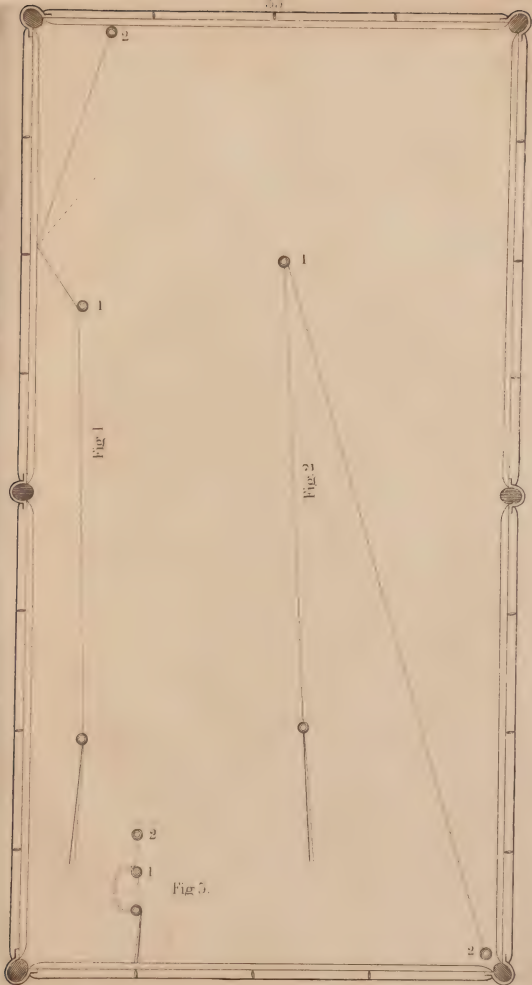






Fig 1



Fig 2



## EXPLANATION OF PLATE No. 36.

*Figure 1.*—To carom on all the balls, without taking a cushion, ball 1 is to be hit fine on the right, as marked. Strike your own ball  $\frac{1}{4}$  L,  $\frac{3}{8}$  B, with Q. S.  $3\frac{1}{2}$ .

*Figure 2.*—To doublet ball 1 in the side pocket, and carom on ball 2—strike your ball  $\frac{1}{2}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{1}{2}$  to 3.

## EXPLANATION OF PLATE No. 37.

*Figure 1.*—To hole ball 1 in the side pocket, and carom on balls 2 or 3, at will:

*Example 1.*—To carom on ball 2, strike your own ball  $\frac{1}{4}$  A, on the central line, with Q. S.  $\frac{1}{2}$  to 1.

*Example 2.*—To carom on ball 3, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{4}$  L, with Q. S.  $1\frac{1}{2}$  to 2.

NOTE.—This last stroke shows what effect the cue has on your own ball, after contact with the object ball, as will be more fully explained in plates Nos. 38, 39, 40, 41, 42, 43, 44, 47 and 48.

*Figure 2.*—To pocket ball 1 in the corner pocket, and carom on balls 2, 3 or 4, by simply altering the quantity of strength:

*Example 1.*—To carom on ball 2, strike your own ball  $\frac{1}{4}$  A, on the central line, with Q. S.  $\frac{1}{2}$  to 1.

*Example 2.*—To carom on ball 3, strike your own ball the same, and increase the strength to Q. S. 3.

*Example 3.*—To carom on ball 4, strike your own ball the same, and increase the strength to Q. S.  $3\frac{1}{4}$ .

NOTE.—Thus it will be seen, that the angles formed by two balls coming in contact, will vary according to the quantity of strength used, as they do from the cushion, as in plate 2, figure 1.

Fig. 1



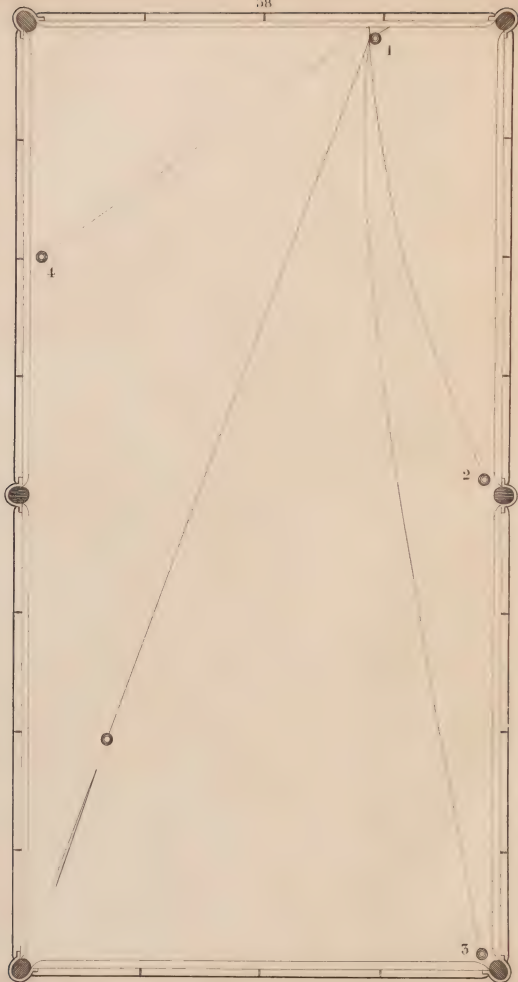
Fig. 2











## EXPLANATION OF PLATE No. 38.

THE object of this diagram is, to show the effect the point of the cue will have on the course of your own ball, after coming in contact with the object ball. It will be observed, that the point of the object ball to be hit, at each stroke, is the same, though the curves and angles delineated, vary according to the manner of striking your own ball—thus:

To carom on ball 2, strike your own ball  $\frac{1}{2}$  R,  $\frac{1}{4}$  A, with Q. S. 2 to  $2\frac{1}{2}$ .

To carom on ball 3, strike your own ball  $\frac{3}{8}$  R,  $\frac{1}{8}$  A, with Q. S. 3 to  $3\frac{1}{2}$ .

To carom on ball 4, strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{8}$  B, with Q. S.  $2\frac{1}{2}$ .

NOTE.—The short line, diverging from ball 1 to the cushion, is intended to show the course the object ball should take, (provided, it is hit at the point,) necessary to effect those caroms.

## EXPLANATION OF PLATE No. 39.

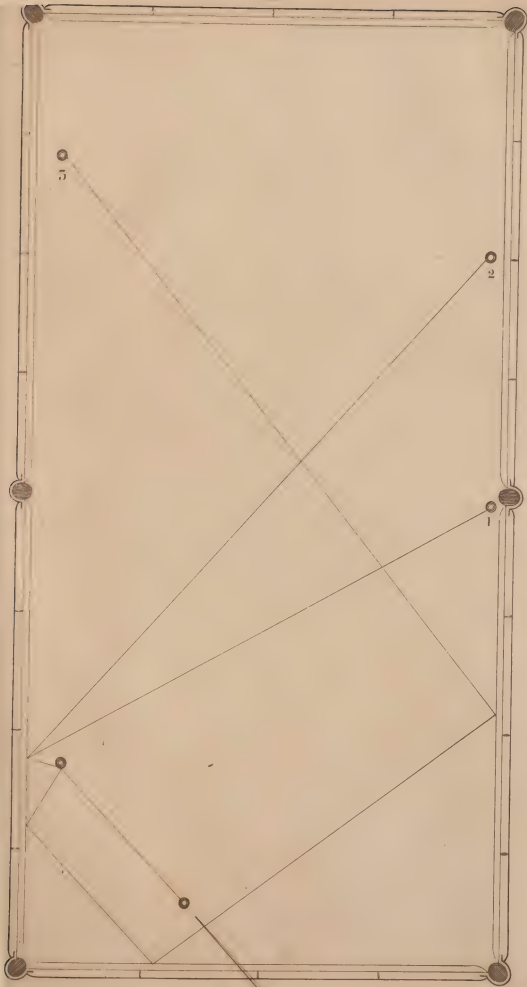
THIS plate is a continuation of the illustration of the effect the cue will have on the ball, in the manner of striking, as in the last plate; the object ball to be struck, each time, at the *same point*, viz:  $\frac{1}{8}$  to the left of the centre.

To carom on ball 1, strike your own ball  $\frac{1}{8}$  A, with Q. S. 2.

To carom on ball 2, strike your own ball  $\frac{1}{4}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{3}{4}$ .

To carom on ball 3, strike your own ball  $\frac{1}{2}$  B,  $\frac{3}{8}$  L, with Q. S.  $3\frac{1}{2}$  to 4.

NOTE.—It would appear rather strange to effect this last carom in the manner represented; but the object of the author is, to show what is possible to be done with the Billiard ball, and the immense control an adept at the game can exercise over the balls; where a less practised player would fail, or would proceed to effect the carom in the easiest and most obvious manner, by playing to the right of the object ball, and causing his own ball to proceed direct to ball 3, the adept takes three cushions, if he feels so disposed, and still succeeds in making the stroke.











## EXPLANATION OF PLATE NO. 40.

To hole ball 1 in the corner pocket, and carom on balls 2, 3, 4, 5 and 6, at will:

1. To carom on ball 2, strike your own ball  $\frac{1}{4}$  A,  $\frac{1}{8}$  R, with Q. S. 2.
2. To carom on ball 3, strike your own ball  $\frac{1}{8}$  A,  $\frac{1}{8}$  R, with Q. S.  $3\frac{1}{4}$ .
3. To carom on ball 4, strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{8}$  B, with Q. S.  $3\frac{1}{4}$ .
4. To carom on ball 5, strike your own ball  $\frac{1}{2}$  R,  $\frac{1}{4}$  A, with Q. S. 3 to  $3\frac{1}{2}$ .
5. To carom on ball 6, strike your own ball  $\frac{1}{2}$  L,  $\frac{3}{8}$  B, with Q. S.  $3\frac{1}{2}$  to 4.

## EXPLANATION OF PLATE NO. 41.

To doublet the object ball in the opposite corner, and carom on balls 1, 2, 3 and 4, at will:

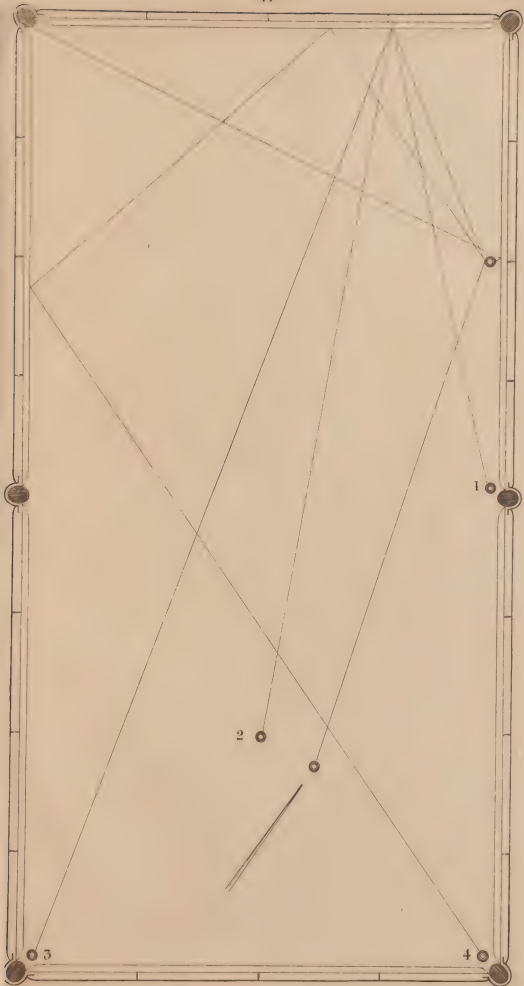
1. To carom on ball 1, strike your ball  $\frac{1}{2}$  R,  $\frac{1}{8}$  A, with Q. S. 2 to  $2\frac{1}{2}$ .

2. To carom on ball 2, strike your ball  $\frac{1}{4}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{1}{2}$  to 3.

3. To carom on ball 3, strike your ball  $\frac{1}{8}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{1}{2}$ .

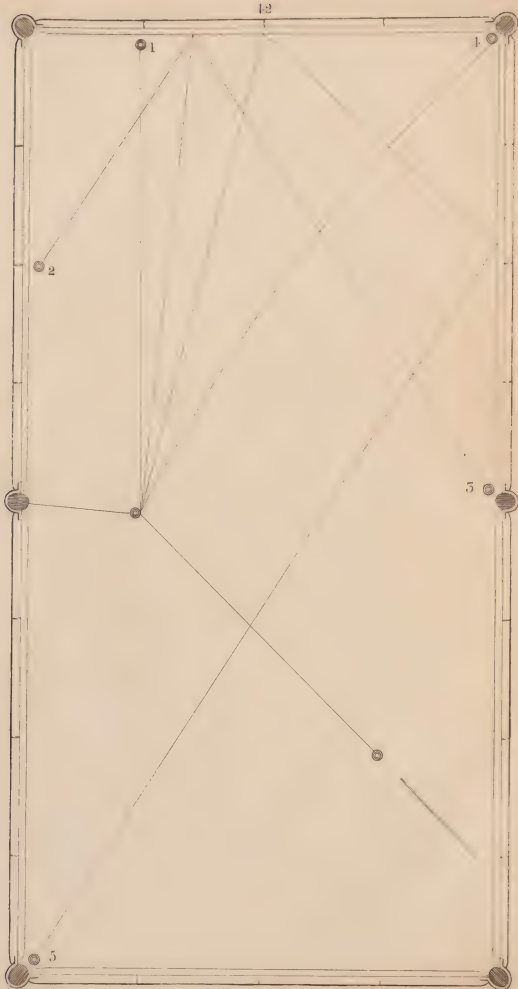
4. To carom on ball 4, strike your ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  B, with Q. S.  $3\frac{1}{2}$ .

NOTE.—More strength being used in the last carom, and the fact of your own ball being struck on the left, causes it to vary in the description of its angles, after leaving the object ball, as will be observed in the diagram, and as explained in plate 37, figure 2.









## EXPLANATION OF PLATE No. 42.

To hole the object ball in the side pocket, and carom on balls 1, 2, 3, 4 and 5, at will:

1. To carom on ball 1, strike your own ball  $\frac{1}{2}$  A, with Q. S. 1.

2. To carom on ball 2, strike your own ball  $\frac{1}{4}$  A,  $\frac{3}{8}$  L, with Q. S.  $2\frac{1}{4}$ .

3. To carom on ball 3, strike your own ball  $\frac{1}{4}$  R,  $\frac{1}{16}$  B, with Q. S.  $2\frac{1}{4}$ .

4. To carom on ball 4, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{8}$  R, with Q. S.  $2\frac{1}{4}$ .

5. To carom on ball 5, strike your own ball  $\frac{1}{2}$  R,  $\frac{1}{16}$  B, with Q. S.  $3\frac{1}{4}$ .

## EXPLANATION OF PPATE No. 43.

To hole the object ball in the corner pocket, and carom on ball 1, 2, 3, 4 and 5, at will:

1. To carom on ball 1, strike your own ball  $\frac{3}{8}$  R,  $\frac{1}{8}$  A, with Q. S. 2 to  $2\frac{1}{2}$ .

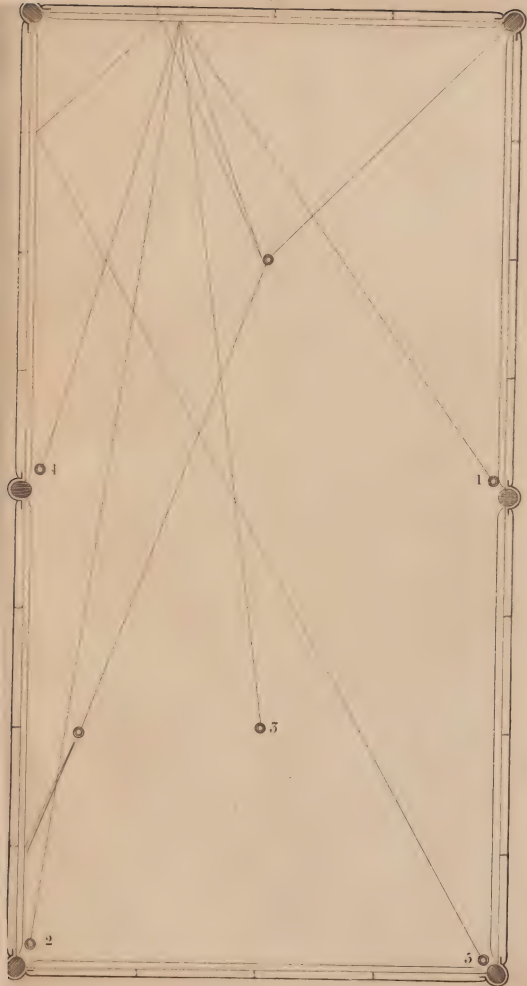
2. To carom on ball 2, strike your own ball  $\frac{1}{8}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{1}{2}$  to 3.

3. To carom on ball 3, strike your own ball  $\frac{1}{2}$  R,  $\frac{1}{8}$  A, with Q. S. 3.

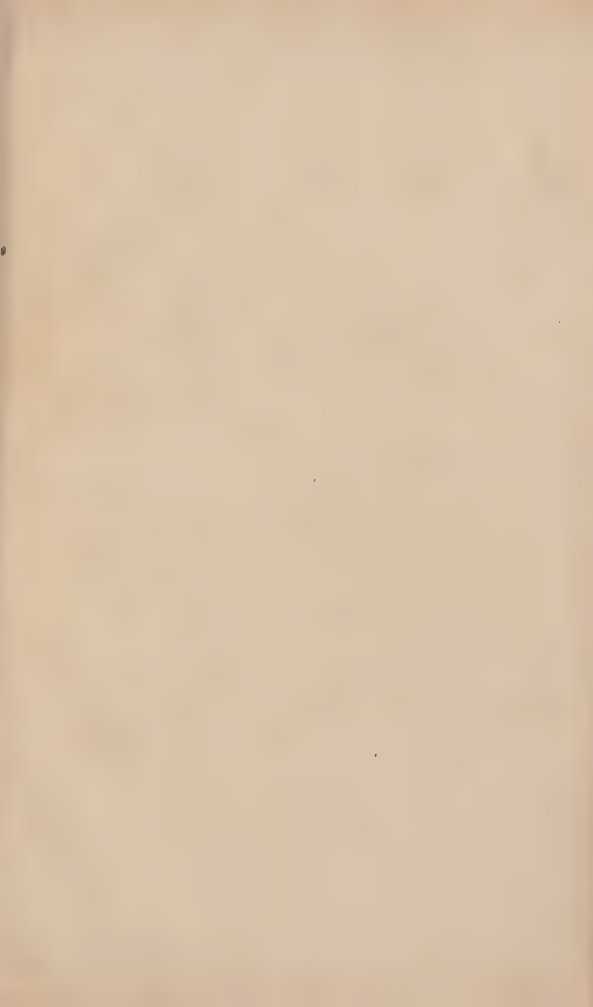
4. To carom on ball 4, strike your own ball  $\frac{1}{4}$  A,  $\frac{1}{16}$  R, with Q. S.  $1\frac{1}{2}$  to 2.

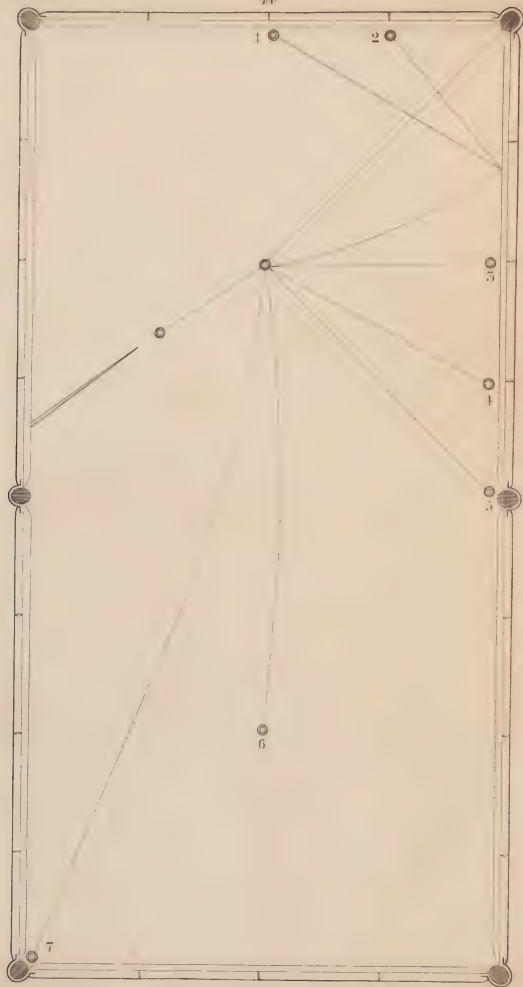
5. To carom on ball 5, strike your own ball  $\frac{3}{8}$  L,  $\frac{1}{16}$  A, with Q. S. 3.











## EXPLANATION OF PLATE No. 44.

To hole the object ball in the corner pocket, and carom on balls 1, 2, 3, 4, 5, 6 and 7, at will:

1. To carom on ball 1, strike your own ball  $\frac{3}{8}$  A,  $\frac{1}{2}$  L, with Q. S. 3.

2. To carom on ball 2, strike your own ball  $\frac{3}{8}$  L,  $\frac{3}{8}$  A, with Q. S. 3.

3. To carom on ball 3, strike your own ball  $\frac{1}{8}$  R,  $\frac{1}{4}$  A, with Q. S.  $2\frac{1}{2}$ .

4. To carom on ball 4, strike your own ball  $\frac{1}{4}$  R,  $\frac{1}{16}$  B, with Q. S.  $3\frac{1}{2}$ .

5. To carom on ball 5, strike your own ball  $\frac{3}{8}$  R,  $\frac{1}{4}$  B, with Q. S.  $3\frac{1}{2}$  to 4.

6. To carom on ball 6, strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$  to 4.

7. To carom on ball 7, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{4}$  L, with Q. S.  $3\frac{1}{2}$  to 4.

## EXPLANATION OF PLATE No. 45.

*Figure 1.*—To play on ball 1, and carom on balls 2 and 3—strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{4}$  A, with Q. S.  $2\frac{1}{2}$  to 3. Ball 1 to be hit fine on the right.

NOTE.—The theory of this stroke may be explained as follows: Your ball being struck above the centre, acquires a rotatory motion. This motion is rotatory to a limited extent, after leaving the cushion; and when your ball comes in contact with ball 2, the resistance offered to it by the latter, together with the motion referred to, will cause it to describe the angle delineated, and make the carom.

*Figure 2.*—To play on ball 1, and carom on ball 2, and from thence, by a force and twist, carom on ball 3—strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  L, with Q. S. 3.

1

Fig. 1

2

3

2

Fig. 2.

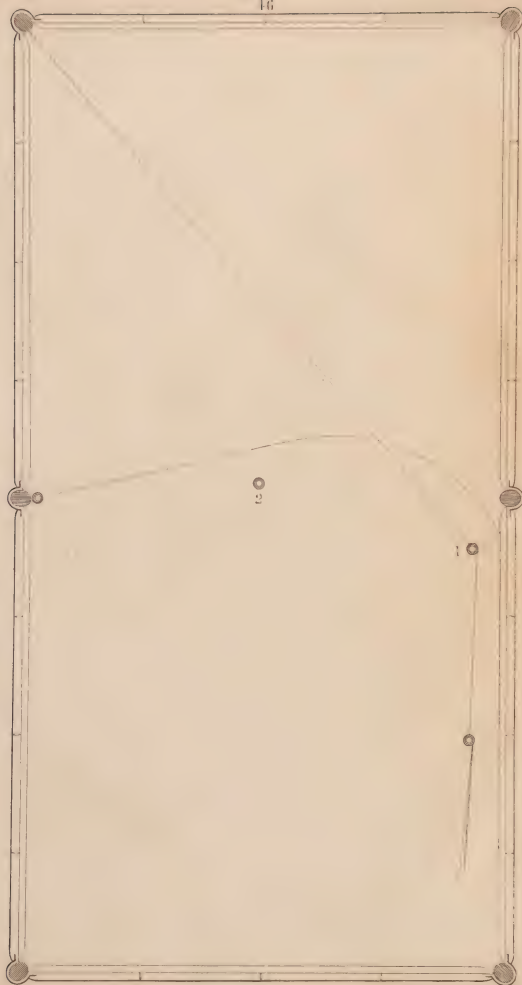
1

3









## EXPLANATION OF PLATE No. 46.

To pocket ball 1, and by a "force" and "twist," describe a curve, clearing ball 2, and carom on the ball opposite the side pocket—strike your own ball  $\frac{1}{4}$  R,  $\frac{3}{8}$  B, with Q. S.  $3\frac{1}{2}$ .

NOTE.—The explanation of this stroke is not easy—a glance at the diagram will make it more intelligible than the most expressive words. When you strike your ball so far below the centre, you communicate to it a retrograde inclination, which begins to act after it has rolled a short distance. Its immediate motion, however, is progressive, and after contact with the cushion, it obtains a third and perfectly distinct one; the combination of the three compels it to move in the curve delineated in the diagram.

## EXPLANATION OF PLATE NO. 47.

THIS plate is designed to show four different ways to effect a carom from ball 1 on ball 2.

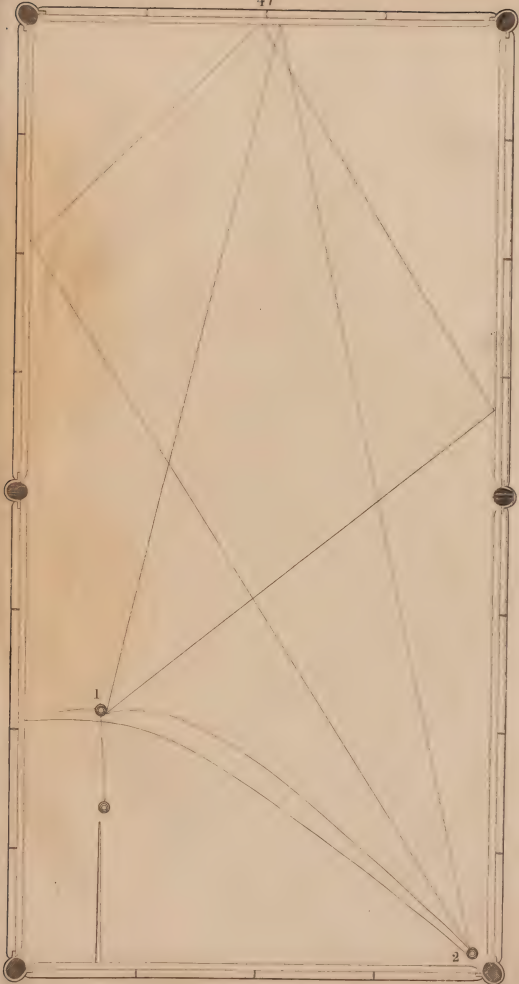
*Carom 1*—To be effected by a “following” stroke on the lower cushion. Strike your own ball  $\frac{3}{8}$  A, with Q: S.  $3\frac{1}{2}$  to 4. Ball 1 to be hit about  $\frac{1}{16}$  to the right of the centre.

*Carom 2*—To be effected by taking three cushions. Strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{8}$  A, with Q. S.  $3\frac{1}{2}$  to 4. Ball 1 to be hit a half-ball on the right.

*Carom 3*—To be effected by a twist and force from the left hand side cushion. Strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{4}$  L, with Q. S.  $3\frac{1}{2}$  to 4. Ball 1 to be hit a quarter-ball to the left.

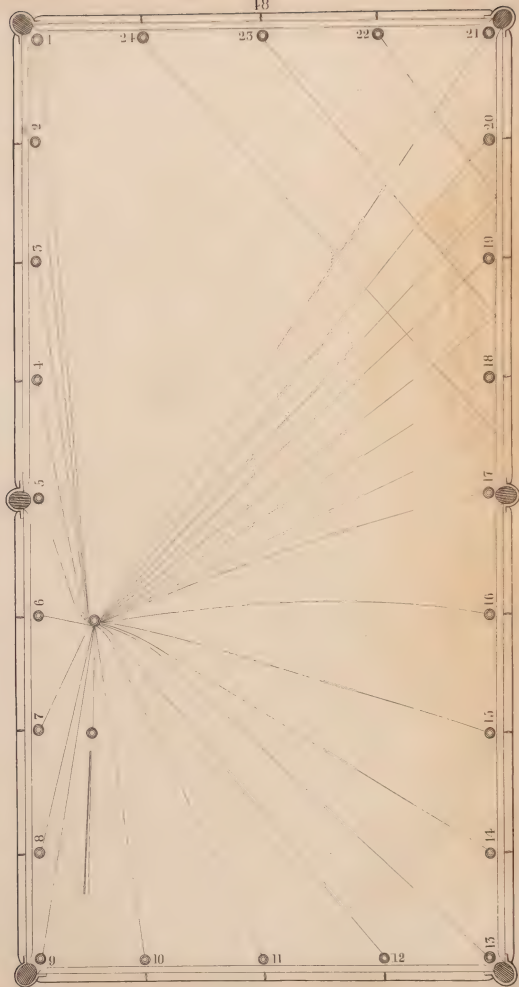
*Carom 4*—To be effected by a “force.” Strike your own ball  $\frac{1}{4}$  B,  $\frac{1}{8}$  L, Q. S. 3. Ball 1 to be hit  $\frac{1}{4}$  R:

NOTE.—The third carom, here delineated, is similar in theory to that represented in the last plate.











## EXPLANATION OF PLATE No. 48.

To place your own ball and the object ball in the positions laid down, and carom on any of the other balls, numbered from 1 to 24, at will, by changing the manner of striking your own and the object ball, and using the proper quantity of strength, described in the following rules:

1. To carom on ball 1, strike your own ball  $\frac{1}{2}$  A, with Q. S. 3. The object ball to be hit very slight to the left of the centre, without being quite "dead full."

2. To carom on ball 2, strike your own ball as above, with the same strength. The object ball to be hit a trifle more to the left than in the first carom.

3. To carom on ball 3, the same stroke as the last. The object ball to be hit a little more to the left of the centre.

NOTE.—The variations, in caroms 1, 2 and 3, in hitting the object ball, should be so slight as not to vary more than  $\frac{1}{16}$  from the centre, *in all three*.

4. To carom on ball 4, strike your own ball  $\frac{1}{4}$  A, with Q. S.  $2\frac{1}{2}$ . The object ball to be hit a full sixteenth to the left of the centre.

5. To carom on ball 5, strike your own ball  $\frac{1}{8}$  R,  $\frac{1}{4}$  A, with Q. S. 1 to  $1\frac{1}{2}$ . The object ball to be struck  $\frac{1}{8}$  left.

6. To carom on ball 6, strike your own ball  $\frac{1}{4}$  L, with Q. S.  $2\frac{1}{2}$  to 3. The object ball to be hit a quarter-ball left.

7. To carom on ball 7, strike your own ball  $\frac{1}{4}$  B,  $\frac{1}{8}$  L, with Q. S.  $1\frac{1}{2}$  to 2. The object ball to be hit  $\frac{1}{8}$  left.

8. To carom on ball 8, strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  L, with Q. S. 3 to  $3\frac{1}{2}$ . The object ball to be hit  $\frac{1}{16}$  to  $\frac{1}{8}$  left.

9. To carom on ball 9, strike your own ball  $\frac{1}{2}$  B, with Q. S.  $3\frac{1}{2}$ . The object ball to be hit less than  $\frac{1}{16}$  left.

10. To carom on ball 10, strike your own ball  $\frac{1}{2}$  B, with Q. S.  $3\frac{1}{2}$ . The object ball to be hit less than  $\frac{1}{16}$  right.

11. To carom on ball 11, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$ . The object ball to be hit  $\frac{1}{16}$  right.

12. To carom on ball 12, strike your own ball  $\frac{1}{2}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$  to 4. The object ball to be hit  $\frac{1}{8}$  right.

13. To carom on ball 13, strike your own ball  $\frac{1}{2}$  B, from  $\frac{1}{8}$  to  $\frac{1}{4}$  L, with Q. S.  $3\frac{1}{2}$  to 4. The object ball to be hit from  $\frac{1}{8}$  to  $\frac{1}{4}$  right.

14. To carom on ball 14, strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{8}$  L, with Q. S.  $3\frac{1}{2}$ . The object ball to be hit a trifle within  $\frac{1}{4}$  right.

15. To carom on ball 15, strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  R, with Q. S.  $3\frac{1}{2}$ . The object ball to be hit the same, as in the last carom.

16. To carom on ball 16, strike your own ball  $\frac{3}{8}$  B,  $\frac{1}{4}$  R, with Q. S.  $3\frac{1}{2}$  to 4. The object ball to be hit  $\frac{1}{4}$  right.

17. To carom on ball 17, strike your own ball  $\frac{3}{8}$  R,  $\frac{1}{8}$  B, with Q. S.  $3\frac{1}{2}$  to 4. The object ball to be hit  $\frac{1}{4}$  right.

18. To carom on ball 18, strike your own ball  $\frac{1}{4}$  R,  $\frac{1}{8}$  A, with Q. S.  $2\frac{1}{2}$  to 3. The object ball to be hit  $\frac{1}{4}$  right.

19. To carom on ball 19, strike your own ball  $\frac{1}{4}$  A, with Q. S.  $1\frac{1}{2}$  to 2. The object ball to be hit  $\frac{1}{4}$  right.

20. To carom on ball 20, strike your own ball  $\frac{1}{4}$  A,  $\frac{1}{8}$  L, with Q. S. 1. The object ball  $\frac{1}{2}$  right.

21. To carom on ball 21, strike your own ball  $\frac{1}{4}$  A,  $\frac{1}{8}$  L, with Q. S. 1. The object ball to be hit fine to the right.

22. To carom on ball 22, from the side cushion, strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{4}$  A, with Q. S. 2. The object ball to be hit a half-ball to the right.

23. To carom on ball 23, from the cushion, strike your own ball  $\frac{1}{4}$  L,  $\frac{1}{4}$  A, with Q. S.  $2\frac{1}{2}$  to 3. The object ball to be hit a half-ball to the right.

24. To carom on ball 24, from the cushion, strike your own ball  $\frac{3}{8}$  L,  $\frac{1}{8}$  A, with Q. S. 3 to  $3\frac{1}{2}$ . The object ball to be hit a quarter-ball to the right.

NOTE.—The caroms can be effected on balls 20, 21, 22 and 23, by a “following” stroke, but not with such certainty as in the manner above described.

## SHORT HINTS, AND A FEW WORDS OF ADVICE, TO BILLIARD ROOM KEEPERS.

---

THE Author's long experience as a practical player, and a Saloon-keeper, must be his justification for offering the following brief hints and advice to his friends, who have not had the same opportunity of acquiring a perfect knowledge of the business. One thing he can assert with confidence, viz: that the course of conduct suggested by him, has invariably given satisfaction to his numerous patrons and friends. He is not a churl of his experience—he is anxious to share it with all. And he hopes sincerely, that his suggestions will be received by the interested parties in the same honest and kindly spirit in which they are proffered.

He desires further to state, that, as an admirer of the NOBLE SCIENCE, he endeavors, if possible, to vindicate it from the charges usually made against it. The unprincipled conduct of many, who have been connected with it—their approval or countenance of dishonesty and chicanery—their utter disregard of manhood and fair-play, doubtless, have given some color for those charges. But the faults of such men are not the faults of the game. The most innocent amusement can be abused, and the habitual gambler can gamble at anything. He hopes to defend his favorite game—to show that its abuse does not argue against its use; and if he succeeds even partially, his object will be attained; he will consider himself amply repaid for the troubles and difficulties encountered in the production of the present work.

In conclusion, he would observe, that his hints, if they do not possess the quaint wit, and keen philosophy of

"Poor Richard," are based on as real experience as were his celebrated aphorisms.

---

Keep your eyes open, and your mouth and ears closed. Never enter into discussions on Religious, Political, or Philosophical subjects.

Decide all disputes arising from, or appertaining to, the game, without fear or favor.

Suspect any one, who professes too much friendship or interest in your success, and promises to use his influence to procure patrons for you—ten to one, in the end, that you find him an unprofitable customer.

Offer no inducements to idlers, loungers, or *dead heads*, as they will be the means of driving off your best customers.

NOTE.—A good way of ridding yourself of the nuisance, is to lend such a dollar or two—the author has never known it to fail.

If possible, avoid keeping a *bar*, as it will prove more a source of annoyance than profit:

1st. Because the room it occupies might be sufficient for another table.

2d. Because the profits on the refreshments and se-gars is scarcely enough to pay for an extra hand to attend it.

3d. The breakage, waste, license, &c., makes a large hole in the receipts arising from the bar.

Besides, Billiards is to be relied on for profit, not your bar.

If you *must* have a bar—keep the *best* of refreshments, as it is an inducement for customers to visit the place where such are kept.

Never make a practice of drinking, or smoking in your own place, and on no occasion drink behind your own bar.

If you are occasionally troubled with rude and boisterous customers, reason and expostulate with them; if that fails, tell them plainly, their conduct injures your business, as it annoys your Billiard patrons, and request them either to *desist* or withdraw their support from you.

Never dispute the amount a gentleman says he may owe you, as he will not, if he be a gentleman, wilfully state it otherwise, than what he thinks is correct.

Show no partiality in your dealings.

A plain, straight forward, manly course, will entitle you to the respect and good will of your patrons.

Avoid all vulgarities, cant phrases, and profane swearing in your own place; if you do feel annoyed, and wish to *let out* a little, take a walk outside, and growl away by yourself till you feel easier; and when you return, you will find yourself—a philosopher.

See to it, that your assistants are polite, civil, and courteous to your patrons.

Keep your tables and cues clean, and in good order, and see that each chalk cup has a lump of chalk in it.

Keep your room clean, orderly, and well ventilated.

Your own deportment should be polite, courteous, and dignified, lest it be mistaken for fawning sycophancy and servility.

Never show your liberality in your own place, by asking people to drink, smoke, &c.

Let your establishment be conducted with system and regularity. Have a stated hour for closing your saloon, and make it as early as possible, or as the nature of your business will admit.

Never bet money in your own place, and, if possible, never allow betting, if you can avoid it.

Always resign, if playing, in favor of your customers, who may want to play.

Keep your temper.

Never *bore* people to play—once is enough to ask them;

indeed, if a table be vacant, and it is desirable, such will play without asking; besides, many gentlemen come as spectators, and their company, so long as it is acceptable to the players, is not at all disagreeable.

Make it a point to pay your "help" punctually. See that they are satisfied, let what will happen.

Never enter other establishments to solicit custom.

Never speak harshly of rival establishments; it looks like envy. Do not be too familiar with your customers, remembering that you are in a manner their servant for the time being; and in the street, recognize them only by returning their salute.

See that your customers are not annoyed, molested, or cheated in your place, and if you perceive any foul play, always expose it, without the slightest regard of consequences.

A few words regard to "bunglers" may not be amiss:

Of all the trials and ills that poor human nature is subject to, the author knows of no more trying situation, than to be bored by this class.

It is hard to convince such, that they should, in proportion, pay as much as expert players for their amusement—as, for instance, a new beginner cannot play more than one or two games in an hour. This would do very well if you had no rent to pay, or no family to provide for, but, unfortunately, the butcher, the baker, the tailor, and other tradesmen, make no allowance in their bills, by reason of your being thus situated.

In contradistinction to this, the adept will play from three to five games per hour, will make little, if any, grumbling or fault-finding, and, consequently, be the most profitable customer.

The author has no doubt incurred the ill will of many Billiard players, for charging according to the time they occupied in playing one or more games, but, for the information of such, he would here state, that he has al-

ways looked on Billiard playing in the same light as the merchant would his goods in his store, or the mechanic his labor. The merchant must have a living profit attached to his goods, and the same reasoning applies to the keeper of the Billiard Saloon.

Another class consists of the petulant man, and the fault-finder. It is a very difficult matter to find a table, balls, cues, or a marker to suit this class. The table runs too easy, or the reverse, the balls are not of the right size, the cues are either too heavy or too light, the game-keeper does not understand his business, and, finally, the room is not properly conducted.

This class should be treated by keepers of Billiard Rooms civilly, but independently.

• And still another class is the communicative *bore*, or talkative gentleman. The author has often been sorely puzzled as to the best way of dealing with this personage. Imagine one of the genus commencing a long, and (to him alone,) interesting narration of an event, which happened to him while a baby in small-clothes; how his grandmother—good old lady—doated on him, and perceived in his pericranium the germs of a genius, which would shake the world, and understand everything, from a cannonade to a carom—detailing the morale of his breakfast, the peculiarity of his dinner, and the catalogue of his whippings, while your patience is exhausted, and your business in complete confusion. Imagine it, and shudder.

The author, through the purest motives of philanthropy, subjoins some of the expedients, by which he has occasionally escaped from the affliction. The advice, which he gives, is the result of bitter experience. Prick up your ears suddenly, and raising your voice, as if you heard a call from a customer, exclaim, "Sand-paper? Yes, Sir," and hurry to the extreme end of the room; ask some player if his cue does'nt slip, and "touch it up" a

little, that it may hold chalk, keeping your eye, meanwhile, on your communicative friend. If he remains, expecting your return, go and regulate the cues, which may have been removed from their regular places, and if he continues waiting, scold one of your game-keepers to kill time, and if this is not sufficient, nothing remains for you but to return as a lamb to the slaughter; say, "yes," to everything he may remark, as a single negative might involve you in an argument—endure it all like a man; but remember to make an arrangement with some friend about the usual time of your torturer's visits, and be punctual in keeping it, or start off to your dinner, your supper, or for oysters, as the case may be, anywhere from him, and his reminiscences of his grandmother.

But if such a person should chance to seize on one of your customers while playing, you are in duty bound to attract his attention to yourself, and submit with the patience of Job. As your customer did not pay his money to become a martyr, you must e'en endure the martyrdom in his stead.

If possible, reserve one seat for the players.

By conducting your establishment on the foregoing principles, when you receive pay for a game of Billiards, you need not *blush*, as you may rest assured, that the player has had his money's worth, and you are getting no more than you are entitled to.



## APPENDIX.

---

### THE MERITS OF DIFFERENT TABLES.

THE Author has often been applied to by parties from different parts of the country, for his opinion of the comparative merits of the several Billiard-tables, built by the manufacturers at present in the business. His reply is briefly this:

The Billiard-table builder, in this State, whose articles, while he was in the business, were considered best—was Mr. D. Penn, or, as he was familiarly styled, “the Governor.” An experience of some thirty or forty years, combined with a thorough knowledge of the minutia of his business, gave him a great advantage over those, who attempted to compete with him. Many of his opponents only learned the trade by piece-meal—now acquiring a mastery of one branch, now of another, but rarely becoming perfect in the whole, and, consequently, were more or less dependent on the skill and intelligence of the workmen, whom chance brought into their employment.

Mr. Winant is the successor of Mr. D. Penn, and if the fact of his having learned his trade from “the Governor,” and the possession of twenty years’ experience, be any argument in favor of his table, we will allow it to go for what it is worth.

One thing is certain, viz: that nine-tenths of the best players in this country have expressed a decided preference for the table of Penn’s build, and have regarded those of his rivals as far inferior in accuracy and symmetry.

One of his competitors was Mr. Bassford, who is still in the business. He claims a patent for the India Rub-

ber, spring steel, elastic, and air cushions. He is certainly deserving of some credit for his continual exertions in improving the Billiard-table. He was the first to introduce the aforesaid cushions into this country, though in England they have been in use for many years, in the *improvement* department. We believe he has not met with much success.

The India rubber, and air cushions, in a measure, suit beginners—mere novices in the game—and all, who disregard the exercise and healthful developement to be derived from it; for on such tables there is no physical exertion—comparatively speaking—required to impel the balls, so great is the elasticity of the cushions. And, therefore, the really scientific player, who is not satisfied with the rapid motion of the balls, but desires to avail himself of all the beauties and attractions, as well as the beneficial physical exercise of the game, invariably prefers the cloth cushions. The reason is obvious: they immeasurably excel, in uniformity of elastic power, and correctness of angles, the other cushions just referred to. In confirmation of this, and to prove, that we have formed no rash or hasty judgment on the subject, but one supported by the experience of distinguished players, I subjoin a copy of a circular, which I addressed to many of them in this country, whose address or place of abode was known to me.

---

(Copy of original Circular.)

NEW YORK, March 9th, 1850.

DEAR SIR:—My object in addressing you is, to ascertain what your choice of tables would be, in case you had to play a match at Billiards, if the selection of the peculiar tables lay with you.

You may perceive, by my challenge, published in the New York *Spirit of the Times*, of the 23d ult., that my

own choice is in favor of the cloth cushions, as I believe that they are more to be depended on, in giving the angles correctly, than any others now in use.

An answer, at your earliest convenience, would very much oblige

Your obedient servant,  
MICHAEL PHELAN.

I subjoin a few of the many letters, which I received. The following note is from Mr. Buckley, who has been long and well known as a billiard player in New York and its vicinity. His undoubted experience and skill entitle his opinion to general respect:

NEW YORK, April 3d, 1850.

DEAR SIR:—In answer to your letter of the 28th March, in regard to Billiard Tables, I will say, that in my experience in playing, (and that has been *some*,) I have always preferred the cloth cushions.

If I was to play a match of Billiards, I should choose one of Winant's cloth cushion Tables, for accuracy of angles, and the running of the Balls.

M. Phelan, Esq.

Respectfully Yours,  
FRANK BUCKLEY.

The subjoined note is from Mr. J. Cooke, whose fame as a player is fully established. Any opinion of his, in relation to the game, can be safely relied upon. Many of my readers, doubtless have heard of him, and will be glad to find that he is as ready as ever to oblige any person who is interested in the game, which he so thoroughly understands:

NEW YORK, April 5th, 1850.

DEAR SIR:—You ask my opinion as regards the cushions of a Billiard table, and which you could place the most dependence on, with respect to accuracy, in giving the correct angles; and if I were to play a match, what kind I would choose? I answer, that I would certainly

choose cloth cushions, as the atmosphere has no effect on them, and you certainly can place more confidence in them, than any other.

Yours Respectfully,  
JAMES COOKE.

To Michael Phelan, Esq.,  
No. 8½ Barclay St.

---

From Philadelphia I have received three letters from the best players in that city. Messrs. Bird, White and Fopulus. Their opinions are substantially the same, as that which has been already expressed. I regret that I cannot make room for their letters, as it is not a little gratifying to me, to find that the opinion, which I have long formed and expressed publicly, is really the opinion of those, who are recognised to be the most accomplished players in the Union.

Mr. Lynn Higham, "the Poney," acknowledged to be the best four-ball player in the world, was at so great a distance, (turning gold in California,) that I could not possibly communicate with him. But I can confidently assert, from an intimate knowledge of his opinion on the subject, that his preference is very decidedly in favor of the cloth cushions. Mr. A. Buist—better known as "Andrew," a celebrated artist in this game—Mr. George Hopkins, one of the "crack" players of this country—Mr. Lake, the great mace and cue player, the most graceful attitudinarian who ever stood by a billiard table—Mr. William Huston of Boston, who is considered second to few in the States—Mr. George Smith, Mr. Benjamin, Mr. Abram Barker, Mr. Miller of Norfolk, all experienced hands—Mr. Ingersol of New Orleans, and many others of standing in the game, entertain the same opinion, and prefer cloth cushion tables.

I think that I have arrayed sufficient evidence to prove the truth of my position. I will add no more, and content myself with expressing a hope, that all who

desire to know my opinion of the comparative merits of tables, will procure this volume, on which I have spared neither labor nor expense, and read in its pages, not an isolated opinion on any branch of the game, but all my views on it, as a whole.

In conclusion, I would say—if I may be pardoned the boast—that the best players in the city attend my own rooms, and all my cushions are cloth. If the attraction be not in the tables, my modesty prevents me from understanding in what it *can* be; but I am inclined to think, that their good taste leads them to perceive the superiority of the cushions, which I have conscientiously recommended.

---

#### THE HEALTHFULNESS OF THE GAME.

IN confirmation of the remarks, which I have made in the body of this work, on the healthfulness of Billiards, I subjoin the following extract from a letter which I received from a distinguished physician, who is himself a most skillful player, and has wielded his cue in many lands; on the banks of the Seine, as well as in the neighborhood of the Hudson. It precludes the necessity of my adding any further remarks to those already before the reader:

“Billiards, I consider one of the most useful, as it is the most fascinating of all games. A good eye, a steady hand, judgment and practice, are the requirements for excellence. At once graceful and amusing, it has its attractions for all classes of society. To the mechanic, it is useful, for it serves as a relaxation from his daily bodily toil. To the merchant and the professional man, whose business is necessarily more or less sedentary, it especially recommends itself; firstly, as a relaxation; secondly, for the exercise which accompanies it. To the invalid and the hypochondriac it is beneficial, as it serves as an abstraction from needless if not injurious trains of

thought, and for the invalid, the exercise is of so gentle a character, (if not indulged in for too great a length of time,) that it cannot be otherwise than useful. I have frequently recommended billiards to individuals who sought for something, which would at once combine pleasure with benefit, and have invariably found it to give satisfaction."

---

THE rapidity with which Billiard rooms and players have increased in this and other cities of the Union, is extraordinary. Within the writer's memory, the number of rooms in New York, did not exceed seven or eight, and perhaps not more than sixteen tables in all; now, there are from fifty to sixty rooms, with a number of tables, varying from one to sixteen in each, and amounting, on the whole, to something over four hundred; the number of players being, according to the author's computation, not less than twenty thousand, exclusive of strangers; together with being the principal scene of Billiard playing in the Union—as having more players and tables than any other city in proportion—it has long been conceded that the players of New York are highest on the American roll of players. New Orleans ranks next, as to the number of tables; though, perhaps, Philadelphia can boast of superior players. Boston, too, has a good number of tables, and Mr. Huston, a Bostonian, is admitted to be a first rate player.

According to reliable information recently received by the author, Paris abounds in Billiard rooms, and almost every Parisian plays. A friend of the author, who has a keen relish for the game, writes from Paris in high admiration of the French tables, and the dexterity and boldness of the play. Speaking of one of the ablest Parisian players, he says—

"I have played with one of its best players, M. Desire, (Eugene, of whom we heard so much, is considered infe-

rior to Desire and one other.) who is certainly a player of the FIRST CLASS. He gave me half the game at the three ball carom game, and came off a little the best at that—hardly a fair trial however, as I played much below my ordinary force, owing to the fact, that I could not use the French cues, which are at least seven inches shorter than ours. They are held by the extreme butt, and therefore, have nothing of what we call the “balance.”

Again, speaking of the tables and the mode of play, he writes,—“All the tables in France are of slate beds; and consequently, the French players know the style of the thing perfectly. About one-fifth or one-sixth of the shots are made by perpendicular strokes; that is, the cue is held exactly perpendicular, and the effect produced by a player of force is astonishing.”

He also describes other effects of equal singularity, as that produced by what we might designate as a perpendicular shot, results which are also produced by different shots, found explained in the context. It will be at once seen, that those perpendicular shots are exceedingly difficult to accomplish, on wooden-bedded tables, be they ever so hard; nor can they be attempted where there is the least irregularity in the bed of the table; as two forces being applied at the same time to the ball, precision in the result must depend on the rigorous exactness of each.

If any interesting details in the principles or practical science of the game, or any details of interest in the mode of play, should be discovered by the author, either from personal observation or reliable information, he will feel great pleasure in communicating it to his readers in a future edition. For the present he feels that his task is done.

## A CARD.

---

THE undersigned avails himself of this occasion to announce to his friends and the public, his purpose to engage in another branch of Billiards, namely, giving practical instruction to such pupils as may honor him with their support. A class will be formed as soon as a sufficient number shall have signified their intention to avail themselves of his instruction. He hopes, also, to have some hours to devote to private pupils, at their residences.

He feels confident that amateur Billiard players will promptly take advantage of this opportunity to perfect themselves in a noble science, as far as that can be accomplished by the advice of one who has acquired such eminence among them, as to feel justified in challenging at his own risk, for the purpose of maintaining our reputation as artists of the noble science, one who has been pronounced the best player in both hemispheres. In England and in France, the teaching of Billiards has become a respectable and a remunerative profession ; and he flatters himself, that while equal to any of their most famous players, in his knowledge of the science and the practical application of that knowledge to the actual game, he is not inferior to any in his efforts to redeem and preserve it from unworthy abuse. In his connection with Billiard rooms, in whatever capacity, he can appeal to all who know him, that he never mixes in gambling of any kind, or allows any when entitled to the superintendence of the place.

No doubt this will appear to many readers perfectly superfluous. But the subscriber, feeling that a prejudice exists against play of all kinds, as leading to habits of extravagance and improvidence, has ever most scrupulously vindicated, as far as he could from such abuse, an



enjoyment which exercises the best faculties of the mind and body, and superinduces the most perfect self-control, the most accurate calculation, and all those higher results, inseparable from practical self-possession and self-reliance. His experience is, that so far from degenerating into a gambler, the player, who appreciates the exact and unfailing results of scientific calculation, will be inevitably impelled in the very opposite direction.

The subscriber has often conversed with men of great scientific attainments relative to the game, and they have invariably expressed their astonishment at his practical familiarity with some of the most abstruse principles, which are the basis of the great laws of the material world. Nor was he previously aware that the same impulses, which from practice and study he was able to communicate to a ball, were in some measure kindred with those which govern the revolutions of all the bodies in our solar system.

This, however, is a digression, and a digression by no means allowable here. To those who love Billiards and desire to study the game, it is not needed; to those who entertain a prejudice against it, it will be without use. The subscriber can only say, he intends it for the best.

He begs now briefly to repeat his purpose, to give lessons, as he has already intimated.

His claims are—his success as a player; his identity in that success, with Americans, and his determination to prove that in this exercise of skill and ability, which in every land has engaged the foremost men, the Americans are equal to any; and, finally, his character as a man.

With these claims, he confidently asks the patronage of his fellow-citizens, and begs to subscribe himself their

Devoted friend and faithful servant,

MICHAEL PHELAN.

Communications for M. P., addressed to D. D. WINANT, 71 Gold street, N. Y., will receive prompt attention.

**D. D. WINANT,**  
**SUCCESSOR TO D. PENN,**  
**NO. 71 GOLD STREET, NEW-YORK,**  
PUBLICATION OFFICE OF THE GREAT AMERICAN WORK,  
**BILLIARDS WITHOUT A MASTER.**

D. D. WINANT would respectfully inform his patrons and the public generally, that he has on hand, at the above Depot, and makes to order, every variety of

**BILLIARD TABLES,**

of the most approved style and workmanship, the material of the best the market affords, and at prices to suit the times. All orders per mail promptly attended to, either for Tables or Trimmings, of which he has every article necessary to the furnishing completely of the Billiard Room, either for public or private use. Mr. Winant would further state, that the facilities he possesses over all others in the trade, he believes is a sufficient guaranty that customers will be better served than at any other establishment in the Union.

Country merchants supplied on the most liberal terms and at the shortest notice. Orders for the purchasing of other goods not in this immediate line, attended to at a charge of five per cent., giving those at a distance the opportunity of purchasing whatever may be desirable, at a less price than the cost of passage and loss of time.

Mr. Winant having purchased the half interest in the copy right of this work of the author, Mr. PHELAN, at great cost, and become the Publisher thereof, having compiled, arranged and furnished a portion of original matter on the rise and progress of the noble Game of Billiards, believes he offers the most complete treatise ever given to the reading public. In presenting this work to the lovers of the science, and others, he deems it the very

book long needed ; that it will be looked on as the text book of the game, and a standard work on Billiards ; at all events, until some other player, of superior ability and intelligence, produces a better one. The full and copious set of Rules, those in particular applying to the Four Ball Game, Fifteen Ball Pool and Pin Pool, are invaluable to Billiard players. The game is so diversified and so liable to contingencies, that heretofore the greatest inconveniences have been experienced, from the want of some recognized code of Rules to govern it. Those hitherto in use were very imperfect, and deficient to such an extent, that the author states that he has known instances where the parties concerned have taken the trouble to apply to BELL'S LIFE IN LONDON, for a decision of questions at issue. It would appear by a perusal of his "Hints" and "Advice" to Keepers of Billiard Rooms, that he must have had some experience in that particular business.

Price, per single copy, . . . \$ 3 00

" ten copies to one address, . . . 25 00

The publisher feeling sure, that the interest, real or fancied, of those in the trade, will induce great opposition to the work, merely suggests that it has been stereotyped, from his entire confidence in its character, and the fact that the author, Mr. Phelan, has actually made every *shot* presented in the diagrams, and is prepared to prove by practical illustration the correctness of the plates. He invites candid criticism and a trial of skill from the opponents of the work. The publisher believes, and is willing to record his opinion, that Michael Phelan, Esq., is one of the best, if not the very best, player in the Union, or the world, at the present day.

D. D. WINANT.

NEW-YORK, July 4th, 1850.

---







